IEEE 802.1 Working Group
July 12-20, 2021 Plenary Session
Electronic
Session Minutes

The Working Group (WG) Chair, Glenn Parsons, presided.
The Recording Secretary, Jessy Rouyer, wrote and/or edited the minutes in part based on input from subgroup Chairs and their Secretaries.

Note that, throughout this document, minuted/recorded inputs from any attendee can not/shall not be assumed to represent a position of their employer or affiliated organization. Discussion points captured do not necessarily reflect the views of the presenter, discussion leader or minute taker, and do not imply consensus unless that is explicitly minuted. The content of draft standards is determined by the ballot process; other formal decisions are the subject of Working Group motions.

1 Attendance and affiliation

The table in this section reflects the attendance (denoted by the ● symbol) and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

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Abdul	Amin	Molex Canada	●	●		●		●			●	●	●			●		●				●		●			●					
Akin	Sami	Volkswagen Ag			●	●			●			●	●					●				●		●								
Alexandris	Konstantinos	Huawei Technologies Duesseldorf GmbH	●	●		●			●	●	●			●		●	●		●			●		●			●	●				
Ananda	Narasimha	Individual			●	●	●	●		●				●	●		●	●		●	●			●	●		●	●				●
Andersdotter	Amelia	None - Self-funded						●																								
Arunarthi	Venkat	Broadcom Corporation	●	●	●	●	●		●	●	●		●	●			●		●	●		●	●				●					
Assmann	Ralf	Marvell Semiconductor, Inc.	●	●		●	●		●	●	●	●	●	●		●	●	●		●	●		●			●	●	●		●	●	●
Belliardi	Rudy	Schneider Electric	●	●	●	●	●		●	●		●	●	●	●		●	●	●		●	●		●	●		●	●	●	●	●	●

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Bierschenk	Jens	Robert Bosch GmbH	●			●		●	●	●		●				●			●				●		●	●	●					●
Bissonette	David	Comcores	●	●		●	●		●	●		●	●	●								●					●		●		●	
Bober	Kai	Bober Fraunhofer HHI*	●																													
Boiger	Christian	b-plus technologies GmbH	●	●		●	●		●	●		●				●	●		●				●	●	●				●		●	●
Bolia	Harsh	Analog Devices Inc.				●																										
Bottorff	Paul	Hewlett-Packard Development Company, L.P.	●	●	●	●	●		●	●	●		●	●			●	●			●	●		●	●	●			●	●	●	
Bruckman	Leon	Huawei Technologies Co., Ltd				●																										
Canchi	Radhakrishna	Kyocera International Inc	●	●		●	●		●		●	●	●		●		●		●		●		●					●	●	●		●
Cavalcanti	Dave	Intel Corporation										●																				
Chan	Pauline	Intel Corporation		●	●		●		●		●	●	●		●		●		●		●		●		●		●					●
Chen	David	Foxconn Industrial Internet			●																											
Chen	Feng	Siemens AG	●	●			●		●		●	●	●		●		●		●		●		●				●		●		●	●
Choudhury	Abhijit	Broadcom Corporation	●	●		●	●		●		●	●	●		●		●		●		●		●		●		●		●			
Coelho	Rodrigo	Siemens AG								●																						
Congdon	Paul	Congdon Consulting, LLC;Tallac Networks, Inc	●	●	●	●	●		●	●	●		●	●	●		●	●	●		●		●	●	●			●	●	●		●
Cummings	Rodney	National Instruments Corporation		●	●	●	●		●	●		●			●						●		●	●	●			●	●	●		●
da Conceicao	Jean-Paul	TSN Systems; Uman technologies	●	●	●	●	●		●	●	●	●	●		●		●	●			●		●			●		●	●	●	●	●
Dhaliwal	Upkar	Future Wireless Technologies	●	●		●																										
Di Taranto	Rocco	Ericsson AB										●																				
Dorr	Josef	Siemens AG	●	●		●			●	●		●	●	●			●		●		●		●		●	●	●		●	●	●	●
Drennan	Michael	DSTL								●																						
Dubrawski	Richard	ViaSat, Inc.	●	●	●	●	●	●	●	●	●	●	●		●			●			●	●										●
Elbakoury	Hesham	Huawei Technologies Co., Ltd				●	●		●		●		●	●			●		●				●	●	●		●		●	●		
Ellegaard	Lars	Microchip Technology, Inc.							●	●		●		●													●					
Engelmann	Anna	Volkswagen AG	●	●	●	●	●		●	●	●		●		●	●			●				●			●		●	●	●	●	●
Enzinger	Thomas	B&R Industrial Automation GmbH	●	●	●	●	●		●	●		●	●		●	●			●								●		●	●	●	●
Fang	Juan	Intel Corporation*		●																												
Farkas	Janos	Ericsson AB	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●
Fedyk	Donald	LabN Consulting, L.L.C.	●	●		●	●	●	●	●		●	●		●	●		●	●		●	●		●	●	●		●	●	●	●	●
Finn	Norman	Huawei Technologies Co., Ltd	●	●		●	●		●	●		●	●		●	●		●	●		●	●	●	●		●	●	●	●	●	●	●
Fischer	Kai	Siemens AG		●																												
Fischer	Wolfgang	Airbus Group	●							●																						
Fotouhi	Mahdi	Shahed University*										●																				
Franchuk	Brian	Emerson Process Management		●				●		●					●				●													
Furch	Andreas	Siemens AG		●																												
Garner	Geoffrey	Huawei Technologies Co., Ltd	●	●		●	●		●	●	●	●	●	●	●		●		●		●	●	●	●	●	●	●	●	●	●	●	●
Gaur	Shashank	TTTech Auto				●																										
Gelish	Joseph	ANSI, SAE, NIST, DOE, ITS America								●																						
Gonzalez	Angela	Huawei Technologies Duesseldorf GmbH		●		●				●		●			●																	●
Gopal	Amrit	Ford Motor Company	●	●	●	●	●		●		●	●	●		●		●		●		●		●		●		●		●		●	●

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Lopes	Joao	Qualcomm Incorporated	●	●		●	●		●	●		●	●	●			●		●	●	●	●		●	●			●	●	●	●	●
Lv	Jingfei	Huawei Technologies Co., Ltd					●		●	●			●						●						●	●						
Lv	Lily	Huawei Technologies Co., Ltd	●	●		●	●		●	●		●	●		●	●			●	●				●	●	●			●	●	●	●
Mangin	Christophe	Mitsubishi Electric Corporation	●	●		●	●		●	●		●					●		●	●	●			●	●	●			●	●	●	●
Mansfield	Scott	Telefon AB LM Ericsson	●	●		●	●		●	●	●			●		●	●		●					●	●	●					●	●
Marks	Roger	EthAirNet Associates;Huawei	●											●																	●	●
Markwart	Christian	Nokia	●	●		●	●		●	●	●	●	●		●			●	●	●	●			●	●	●			●	●	●	●
Mater	Olaf	Marvell Semiconductor, Inc.	●	●	●	●	●		●	●	●		●	●			●		●	●		●		●	●	●					●	
Mazor	Nadav	Vayyar*																														●
McCall	David	Intel Corporation	●	●	●	●					●			●			●		●	●		●		●	●				●	●	●	●
McMillan	Larry	Western Digital Corporation			●				●	●	●	●			●	●		●	●		●	●		●	●				●	●	●	●
Nakano	Hiroki	CAHI Corporation;Kyoto University	●	●	●	●	●		●	●		●	●		●			●	●			●		●	●				●	●	●	●
Nelson	Brent	Collins Aerospace									●																					
Nikolich	Paul	SAMSUNG	●											●																		
Nomura	Takumi	Honda R&D	●	●			●			●		●					●															●
Noseworthy	Bob	University of New Hampshire InterOperability Laboratory (UNH-IOL)				●		●	●		●	●	●		●			●	●	●	●		●						●	●	●	
Orlando	Christian	IEEE STAFF*										●									●				●					●		
Osagawa	Daisuke	Mitsubishi Electric Corporation						●	●			●									●								●			
Pannell	Donald	NXP Semiconductors	●	●		●	●		●	●		●	●	●	●	●			●			●	●			●			●	●	●	
Parsons	Glenn	Ericsson AB	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●
Pearn	Richie	NXP Semiconductors	●	●		●			●	●		●		●	●			●		●				●						●		
Peng	Xiaolin	Huawei Technologies Co., Ltd*	●																													
Perez	Dan	IEEE STAFF									●																					
Peters	Scott	Analog Devices, Inc.		●																												
Petre	Razvan	Spirent Communications	●	●	●	●	●		●	●		●	●		●			●	●		●		●		●	●			●	●	●	●
Pfaff	Oliver	Siemens AG		●																												
Proell	Dieter	Siemens AG	●	●		●	●		●	●		●	●	●	●			●	●		●		●		●				●	●	●	●
Randall	Karen	INDEPENDENT;Tallac Networks, Inc	●	●	●	●	●	●		●	●			●		●				●		●		●		●				●	●	●
Rang	John	GE Aviation						●		●																						
Riegel	Maximilian	Nokia	●								●			●				●			●		●		●				●		●	●
Rodrigues	Silvana	Huawei Technologies Co., Ltd	●	●	●	●	●		●	●		●	●	●	●			●	●		●		●	●	●	●			●	●	●	●
Rolfe	Benjamin	Blind Creek Associates													●																	
Rouyer	Jessy	Nokia	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●				●	●	●	●			●	●	●	●
Santinelli	Luca	Airbus Group									●																					
Sato	Atsushi	Yokogawa Electric Corporation	●	●	●	●	●		●			●	●		●		●				●		●		●	●			●	●	●	●
Scanlon	Greg	Lockheed Martin Corporation									●																					
Schewe	Frank	Phoenix Contact	●	●		●	●		●	●		●	●	●				●	●		●		●	●	●				●	●	●	●
Seaman	Michael	Individual	●	●			●	●							●				●		●											
Seewald	Maik	Cisco Systems, Inc.	●	●		●	●		●	●		●	●						●		●				●	●			●	●		
Sisto	John	Microchip Technology, Inc.													●																	
Sivakolundu	Ramesh	Cisco Systems, Inc.	●	●	●	●	●		●	●		●	●	●	●			●	●		●		●		●	●			●	●	●	●
Smith	Malcolm	Cisco Systems, Inc.													●																	

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18. TSN, Thu Jul 15, 14:00-16:00
19. YANGsters, Thu Jul 15, 14:00-16:00
20. TSN Ad Hoc, Thu Jul 15, 16:05-18:00
21. TSN, Fri Jul 16, 09:00-11:00
22. TSN - IEC/IEEE 60802, Fri Jul 16, 09:00-11:00
23. Security, Fri Jul 16, 11:00-13:00
24. TSN, Fri Jul 16, 11:30-13:30
25. Maintenance, Fri Jul 16, 14:00-16:00
26. TSN, Mon Jul 19, 09:00-11:00
27. TSN - IEC/IEEE 60802, Mon Jul 19, 09:00-11:00
28. TSN, Mon Jul 19, 11:30-13:30
29. Maintenance, Mon Jul 19, 14:00-16:00
30. Closing Plenary, Tue Jul 20, 09:00-12:00

Last name	First name	Affiliation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Specht	Johannes	Self; Analog Devices, Inc.; Mitsubishi Electric Corporation; Phoenix Contact GmbH & Co. KG; PROFIBUS Nutzerorganisation e.V.; Siemens AG; Texas Instruments, Inc.	●	●	●	●	●		●		●	●	●	●	●		●	●	●	●	●			●	●	●	●	●	●	●	●	●
Stanica	Marius	ABB AB	●	●			●		●	●		●		●			●	●		●		●					●			●		●
Steindl	Guenter	Siemens AG	●	●		●	●		●	●		●	●	●			●	●		●		●		●			●	●		●	●	●
Striffler	Tobias	Siemens AG			●	●									●			●		●						●		●				
Sun	Liyang	Huawei Technologies Co., Ltd	●						●	●			●							●						●						●
Takita	Daisuke	Mitsubishi Electric Corporation		●					●			●		●						●						●						
Tarui	Isao	Mitsubishi Electric Corporation	●	●			●		●			●		●						●						●						
traore	karim	Microchip/Microsemi Corporation	●	●		●	●		●	●	●		●	●			●	●		●	●			●	●			●	●	●	●	●
Turner	Max	Ethernovia, BMW, Ruetz System Solutions	●	●		●	●	●		●	●	●	●	●			●	●		●		●	●		●	●		●	●	●	●	●
Varga	Balazs	Ericsson AB	●	●	●	●	●		●	●	●	●	●				●	●		●			●	●	●			●	●	●	●	●
Venkatesan	Ganesh	Intel Corporation	●	●		●	●		●	●		●	●				●	●		●		●		●	●			●	●			●
Visoky	Jack	Rockwell Automation*				●																●										
Wang	Tongtong	Huawei Technologies Co., Ltd	●	●		●	●		●		●	●	●				●			●	●			●	●	●	●					●
Wang	Xinyuan	Huawei Technologies Co., Ltd	●						●																							●
Weber	Karl	Beckhoff Automation	●	●		●			●	●	●	●	●	●			●	●		●	●		●									
Weichlein	Thomas	Siemens AG*				●																										
Wessels	Leon	Uman Technologies ZA	●	●	●	●	●		●	●		●	●	●			●		●			●		●				●	●			●
Winkel	Ludwig	PNO e.V.	●	●	●	●	●		●	●		●	●	●			●	●		●			●	●	●	●	●					
Woods	Jordon	Analog Devices Inc.	●	●		●	●		●			●	●	●	●		●	●		●			●		●	●	●	●				
Yamaura	Takahiro	TOSHIBA Corporation	●	●	●	●	●		●	●		●	●	●			●		●			●		●	●	●	●	●	●			
Yanli	Xu	Enjoymove.cn*				●									●																	
Yin	Yue	Huawei Technologies Co., Ltd	●	●	●	●	●		●	●		●	●				●	●		●	●			●	●	●				●	●	●
YU	Yi	Rockwell Automation		●				●			●		●	●	●	●					●						●					●
Zeier	Uwe	Hilscher Gesellschaft fur Systemautomation mbH	●	●	●	●	●		●	●		●	●	●			●		●			●	●			●	●					
Zein	Nader	NEC Europe (NLE)	●		●	●			●			●		●			●	●														●
Zhao	William	Siemens AG	●	●		●	●	●	●	●	●		●	●	●		●	●	●			●	●	●				●	●	●		
Zhuang	Yan	Huawei Technologies Co., Ltd	●						●																							●
Zimmerman	George	CME Consulting/ADI, Cisco Systems, CommScope, Marvell, SenTekSe LLC													●																	
Zinner	Helge	Volkswagen AG	●	●	●	●	●		●	●	●		●	●			●	●		●			●	●	●			●	●			
Zuponcic	Steven	Rockwell Automation		●					●			●		●							●						●			●		

(*) Last name, first name and affiliation derived from Webex access information and not otherwise provided in IMAT.

2   802.1 Officers and Leadership

- Chair: Glenn Parsons
- Vice-Chair and Recording Secretary: Jessy Rouyer
- Executive Secretary: Stephan Kehrer
- Liaison Secretary: Karen Randall
- Maintenance TG Chair: Paul Congdon
- Security TG Chair: Mick Seaman
  - Security TG Vice-Chair: Karen Randall
- TSN TG Chair: János Farkas
  - TSN TG Vice-Chair: Craig Gunther
  - TSN TG Secretary: Christian Boiger
  - IEC/IEEE 60802 Joint Project Chair: Ludwig Winkel
  - IEC/IEEE 60802 Joint Project Secretary: Josef Dorr
  - IEEE P802.1DP / SAE AS6675 joint project co-Chairs: Abdul Jabbar and János Farkas
  - IEEE P802.1DP/SAE AS6675 joint project Secretary: Marina Gutiérrez
- Nendica Chair: Roger Marks
- YANGsters Chair: Scott Mansfield
  - YANGsters Vice-Chair and Secretary: Stephan Kehrer
- Maintenance of Email exploder: Mark Hantel and Hal Keen
- Maintenance of website: Roger Marks

3   Opening Plenary Meeting

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Call to order Jul 12, 2021 at 9:00 ET by the Chair who presided. The Recording Secretary wrote the minutes.

The Chair presented "Opening Plenary July 2021" finalized as http://www.ieee802.org/1/files/public/minutes/2021-07-opening-plenary-slides.pdf.

During this presentation, the Chair:
- Introduced the agendas on slide 2 that were tacitly approved.
- Presented slide 3 thereby providing the following information:
  - IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
  - Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.
- Showed IEEE SA Copyright Policy slides 4 and 5.
- Showed slides 6 through 10 (reproducing slides 0 through 4 of the IEEE SA PatCom Patent Slides for Standards Development Meetings, separately available at http://standards.ieee.org/about/sasb/patcom/materials.html).
  The Chair:
  - Presented information on these slides including:
    - Instructions for the WG Chair;
    - Participants have a duty to inform the IEEE;
    - Ways to inform IEEE;
    - Other guidelines for IEEE Working Group meetings; and
    - Patent-related information.

- o Advised WG attendees that:
  - 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 IEEE is not aware. Additionally, neither 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.
  - o Made the "Call for Potentially Essential Patents", i.e. 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.
    - There were no responses to the call.
- Presented slides 11 through 13 reproducing the IEEE SA slides 1 through 3 approved by SASB in June 2019 regarding IEEE Codes of Ethics and Conduct, participation in the "individual process", and dominance, thereby conveying that:
  - o Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct (slide 11);
  - o Participants in the IEEE-SA "individual process" shall act independently of others, including employers (slide 12); and
  - o IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints (slide 13).
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 14);
  - The Chair called for any members of the press (i.e., anyone reporting publicly on this meeting) to announce their presence: there were no responses to the call.
- Asked participants to record attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker (slide 15).
- Provided electronic meeting guidelines (slide 16).
- Made subgroup announcements (slide 17) thereby reminding subgroup Chairs of their obligation to:
  - o Remind participant at the start of the first subgroup meeting that the meeting is subject to the policies in "MEETING INTRODUCTION" presentations made available beforehand (as announced in the opening plenary meeting) and, in the case of a Task Group (TG), to make the "Call for Potentially Essential Patents" and minute any responses to it;
  - o After any recess, announce that the meeting remains subject to the policies as read and displayed in the opening plenary meeting; and
  - o At meeting start and after any recess, ask participants to record attendance in IMAT and, if unable to do so, to promptly provide their affiliation to the minute taker.
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 18).
- Introduced 802.1 officers and leadership (slide 19) thanking Christian Boiger and Marina Gutiérrez for volunteering as the newly appointed TSN TG Secretary, and IEEE P802.1DP/SAE AS6675 joint project Secretary, respectively.
- Discussed 802.1 WG Process (slide 20) introducing a new work process leveraging Nendica to vet all new 802.1 work, a process supported by modifications proposed as part of Nendica ICAID renewal.
- Provided an update on current joint development procedures (slide 21).
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 22), requesting and retaining voting membership (slide 23), and

responding to WG ballots and E-Polls as well as regarding the consequences of not responding to WG ballots and E-Polls (slide 24).

- Reviewed the list of 802.1 voters (slide 25), including information about individuals who may gain (slides 26 and 27), will lose (slide 28), may lose (slide 29) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 30).
- Reviewed the schedule for future interim sessions and those changed to electronic due to COVID-19 (slide 31):
  - May 18-22, 2020
    - Pasadena, CA, USA hosted by Ethernet Alliance
    - Changed to electronic due to COVID-19
  - September 21-25, 2020
    - Stuttgart, DE hosted by Hirschmann
    - Changed to electronic due to COVID-19
  - January 2021
    - Changed to electronic due to COVID-19
  - May 3-7, 2021
    - Santa Fe, NM, USA hosted by Analog Devices
    - Changed to electronic due to COVID-19
  - September 20-24, 2021
    - Stuttgart, DE hosted by Hirschmann
    - Changed to electronic due to COVID-19
  - January 2022
    - Proposed to be changed to electronic due to COVID-19
  - May 2022
    - Santa Fe, NM, USA hosted by Analog Devices (proposal in "IEEE 802.1 Interim Meeting Proposal Santa Fe, New Mexico May 2022" https://www.ieee802.org/1/files/public/docs2021/admin-woods-May2022-interim-proposal-0305-v01.pdf)
  - September 2022 (proposal in Geneva, CH)
    - 12-16 Sept 2022: co-located 802.1/802.3 meetings
    - 17 Sept 2022 (Saturday): Joint ITU-IEEE workshop
    - 19-30 Sept. 2022: ITU-T SG15
    - The Chair noted this would be collocated with ITU-T Study Group 15 and is shifted from January 2022 as ITU has decided that they will not have in-person Study Group meetings until July 2022.
- Reviewed the schedule for future plenary sessions and those cancelled or changed to electronic due to COVID-19 (slide 32), also summarizing related 802 Executive Committee discussions:
  - March 15-20, 2020 – Atlanta, GA, USA
    - Hilton Atlanta (cancelled due to COVID-19)
  - July 12-17, 2020 – Montreal, QC, Canada
    - Sheraton Montreal (changed to electronic due to COVID-19)
  - November 8-13, 2020 – Bangkok, Thailand
    - Bangkok Marriott Marquis Queen's Park (changed to electronic due to COVID-19)
  - March 14-19, 2021 – Denver, CO, USA
    - Hyatt Regency Denver (changed to electronic due to COVID-19)
  - July 11-16, 2021 – Madrid, Spain
    - Marriott Madrid Auditorium (changed to electronic due to COVID-19)
  - November 14-19, 2021 – Vancouver, BC, Canada
    - Hyatt Regency Vancouver
  - March 13-18, 2022 – Orlando, FL, USA

- Disney Springs
    - July 10-15, 2022 – Montreal, QC, Canada
        - Sheraton Montreal
    - November 13-18, 2022 – Bangkok, Thailand
        - Marriott Marquis Queen's Park
- Reviewed the list of dates by which the decision to hold a future session would have to be made (slide 33) and addressed comments on this and the previous two slides.
    - Plenary sessions
        - November 14-19, 2021 – Vancouver, BC, Canada
            - **Latest possible decision date:** September 7, 2021
        - March 13-18, 2022 – Orlando, FL, USA
            - **Latest possible decision date:** November 2, 2021
    - Interim sessions
        - January 17-21, 2022
            - Choose electronic week at July plenary
            - 802.3: Jan 10-21 802.11: Jan 17-21
        - May 2022, Sante Fe, NM, USA
            - Defer hosting confirmation to November plenary?
- Conducted the following Straw Polls (slide 34):
    - What week do you prefer for the IEEE 802.1 January 2022 Interim Electronic Meeting?
        - January 17 - January 21, 2022: 37
        - January 24 - January 28, 2022: 34
        - No answer: 20
    - Will you be able to attend the May 2022 interim meeting if it is held in-person?
        - Yes: 39
        - No: 7
        - Don't Know: 28
        - No answer: 16
    - 94 participants "in the room" for both straw polls
- Reported the following items out of the 802 Executive Committee (EC) plenary session #127 (electronic plenary session #4) (slide 35):
    - Mixed mode meetings ([EC-21-157](#))
        - EC mixed mode adhoc starts July 27th
        - Experiment for closing EC with 802 chair, staff and others at IEEE HQ
    - Computer Society SAB
        - Coordinating LMSC and SMSC to differentiate scopes of IEEE/IEC P60802 and P2971/P2972
        - Study Group recommended to be setup to allow joint discussion
    - 802 Task Force ([EC-21-123](#))
        - Update on tools project (document management and attendance - replacement of Mentor/IMAT)
    - Future Venues ([EC-21-90](#))
        - Vancouver – Nov 2021 ([EC-21-153](#)) - Decision deferred to Sept 7th
        - Orlando – Mar 2022 – Decision on Nov 2nd
    - Treasurer ([EC-21-155](#))
        - 2021 loss projected at $23k, reserves now $900k ($600k cash, $300k committed)
        - Penalties for cancelled meetings so far = $0 -- Mar 2022 penalty greater than reserves

- ▪ SA President Townhall for LMSC ([EC-21-156](#))
  - ○ Proposed for the week of August 9th
- Introduced material on the LMSC restructuring ad hoc (slide 36), and requested that Roger Marks introduce, which he did, material regarding LMSC Mission Statement (slide 37) and LMSC Architecture (slide 38), the Chair thanking Marks for leading related efforts.
- Showed the straw polls planned to be conducted at the closing plenary meeting (slide 39):
  - ○ When do you expect the next in-person 802.1 session will be?
    - ▪ November 2021
    - ▪ March 2022
    - ▪ May 2022
    - ▪ July 2022
    - ▪ Sept 2022
    - ▪ Nov 2022
    - ▪ 2023 or later
  - ○ Will you attend the 2021 November IEEE 802 Plenary if held in-person at the Hyatt Regency Vancouver in Vancouver, Canada Nov 14-19, 2021
    - ▪ Yes/No
- Reviewed the list of 802 EC meetings to be held during this plenary session (slide 40).
- Provided information about public review (slide 41).
- Pointed out 802.1 PAR extensions, related CSDs, Nendica ICAID renewal (slide 42) and other 802 PARs, PAR extension, PAR modification, related CSDs and draft 802.1 comments (slide 43) that are up for vote or finalization during this IEEE 802 plenary session.
- Highlighted notable pre-PAR activity (i.e., study groups) in 802.3 and 802.15.6 (slide 44).
- Requested that Karen Randall, Liaison Secretary, introduce liaison resources (slide 45), which she did, including pointing to the liaison tracking web page at https://1.ieee802.org/liaisons/liaisontable/.
- Reviewed, with the Liaison Secretary's support, the set of new (slide 46) and previously-received (slide 47) incoming liaisons to be handled by specific subgroups as listed.
- Summarized progress made in updating Registration Authority EtherType assignments (slide 48) encouraging comments.
- Discussed promotion of the work of the WG (slide 49), introducing the new TSN logo for future use in promoting TSN-related efforts, mentioning TSN tutorial/webinars under preparation with IEEE SA marketing, asking Jessy Rouyer, Vice-Chair, to host a TSN TG ad hoc to be held Jul 15, 2021 after TSN TG meetings to review the draft IEEE SA Beyond Standards blog post on 802.1CM and 802.1's 2020 IEEE SA Emerging Technology Award, and encouraging 802.1 participants to reach out to János Farkas, TSN TG Chair, if they wish to use a 25% discount for attending the 2021 TSN/A conference.
- Requested John d'Ambrosia, 802 Public Visibility Standing Committee Chair, to provide an update, which he did, regarding public visibility messaging and including an invitation for 802.1 participants to volunteer for "Tech Talks", for example on TSN (slides 50 and 51).
- Requested Roger Marks, Nendica Chair, to summarize, which he did, the outcome of the 802 tutorial on cut-through forwarding (slide 52).
- Summarized the various types of IEEE Awards and encouraged nominations (slide 53)
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 54).
- Presented the timeline for 802.1Q revisions and amendments (slide 55) and options for EC approvals of 802.1Q-Rev to Standards Association (SA) ballot and P802.1BA-Rev to Review Committee (RevCom) (slide 56).
- Clarified how IEEE Std 802.1D-2004 was superseded by IEEE Std 802.1Q-2014 and noted

discussion of further related steps would be held in the Maintenance TG (slide 57).
- Showed the 802.1 plenary schedule for this session, which was tacitly approved (slide 58).
- Listed 802.1 management meetings (slide 59).
- Reminded the Working Group of the logistics orientation to be held Jul 12, 2021 13:30 ET (slide 60).
- Requested that subgroup agendas be presented (slide 61):
  - Paul Congdon, Maintenance TG Chair, presented the agenda on slide 62.
  - Mick Seaman, Security TG Chair, presented the agenda on slide 63.
  - Ludwig Winkel, IEC/IEEE 60802 Joint Project Chair, Craig Gunther, TSN TG Vice-Chair and János Farkas, TSN TG Chair, presented the agenda on slide 64.
  - Roger Marks, Nendica Chair, presented the agenda on slide 65.
  - Scott Mansfield, YANGsters Chair, presented the agenda on slide 66.
- Called for Any Other Business (slide 67).
  - No further business was discussed in this meeting.

11:13 ET adjournment

4 Maintenance Task Group

Between this session and the preceding session, the IEEE 802.1 Maintenance Task Group (TG) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the Maintenance TG meeting held 2021-05-18 11:01 - 13:02 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;ab58d5a9.21
- Minutes of the Maintenance TG meeting held 2021-05-25 11:00 - 12:57 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;9fc4bf6e.21
- Minutes of the Maintenance TG meeting held 2021-06-01 11:03 - 13:03 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;5c4bf71b.21
- Minutes of the Maintenance TG meeting held 2021-06-08 11:02 - 13:10 ET (revised)
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;b026feb6.21
- Minutes of the Maintenance TG meeting held 2021-06-15 11:00 - 13:02 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;3b57274.21
- Minutes of the Maintenance TG meeting held 2021-06-22 11:02 – 13:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;b0e4c932.21
- Minutes of the Maintenance TG meeting held 2021-06-29 11:03 – 13:17 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;6385a541.21
- Minutes of the Maintenance TG meeting held 2021-07-09 11:05 – 13:05 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;df423404.21

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Call to order Jul 13, 2021 at 14:00 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.

The Maintenance TG Chair showed this presentation advising that the following, provided beforehand, applies:

- 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 IEEE is not aware. Additionally, neither 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.
- IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
- Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.

The Maintenance TG Chair made the Calls for Potentially Essential Patents at the beginning of each TG meeting during this session thereby providing 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: there were no responses to these Calls prior to the end of the session.

The Maintenance TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The Maintenance TG chair presented the agenda in https://1.ieee802.org/july-2021-plenary-session-electronic-maintenance-agenda/
   Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.

3. Review Maintenance motions. The Maintenance TG Chair presented "Motion Summary" in "Maintenance Task Group Electronic Meetings" https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-0721-1-v01.pdf
   Disposition: Clarification of requirements for P802.1AS-2020/Cor1 and P802.1BA-Rev SA motions was made. Suggested updates to the EC motion on 802.1D withdrawal were made.

4. Status of 802.1D Withdrawal Actions. Glenn Parsons, 802.1 Chair, presented "802.1D withdrawal" https://www.ieee802.org/1/files/public/docs2021/maint-parsons-802.1D_withdrawal_status-0721-v01.pdf.
   Disposition: For information.

5. Response to 802 PARs under consideration. The Maintenance TG Chair presented current draft responses and led the drafting of responses to 802 PARs:
   - "Comments on P802.3de PAR & CSD From 802.1" https://www.ieee802.org/1/files/public/docs2021/admin-draft-PAR-CSD-comments-802-3-0721-v01.pdf.
   - "Comments on P802.15 PARs & CSDs From 802.1" https://www.ieee802.org/1/files/public/docs2021/admin-draft-PAR-CSD-comments-802-15-0721-v01.pdf.

   Disposition:
   - Response to IEEE 802.3 drafted: "Comments on P802.3de PAR & CSD From 802.1" https://www.ieee802.org/1/files/public/docs2021/admin-PAR-CSD-comments-802-3-0721-v01.pdf
   - Drafting the comments for IEEE 802.15 was postponed. An ad hoc meeting was scheduled to finish drafting the comments: Agenda of the IEEE 802.1 Maintenance

TG Ad Hoc meeting to be held during the 2021-07-12 - 2021-07-20 session
https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4b485894.21

6. P802.1BA-Rev/D1.0 Comment Resolution. David McCall, P802.1BA-Rev editor, led the disposition of comments received on https://www.ieee802.org/1/files/private/ba-rev-drafts/d1/802-1BA-Rev-d1-0.pdf.
    Disposition: Partial disposition. Comments 1, 2, 9, 16, 17, 29, 50, 52, 53, 54, 59 and 73 were discussed. Final disposition expected on Friday Jul 16, 2021.

16:12 ET recess

Call to order Jul 14, 2021 at 16:30 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

7. The Maintenance TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
8. Response to 802 PARs under consideration. The Maintenance TG Chair continued leading the drafting of responses to 802 PARs.
    Disposition:
    - Response to IEEE 802.3 updated: "Comments on P802.3de PAR & CSD From 802.1" https://www.ieee802.org/1/files/public/docs2021/admin-PAR-CSD-comments-802-3-0721-v02.pdf.
    - Response to IEEE 802.15 drafted: "Comments on P802.15 PARs & CSDs From 802.1" https://www.ieee802.org/1/files/public/docs2021/admin-PAR-CSD-comments-802-15-0721-v02.pdf.

18:29 ET recess

Call to order July 16, 2021 at 14:00 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

9. The Maintenance TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
10. P802.1BA-Rev/D1.0 Comment Resolution. David McCall, P802.1BA-Rev editor, continued leading the disposition of comments received on https://www.ieee802.org/1/files/private/ba-rev-drafts/d1/802-1BA-Rev-d1-0.pdf.
    Disposition: Final disposition. https://www.ieee802.org/1/files/private/ba-rev-drafts/d1/802-1BA-Rev-d1-0-dis-v01.pdf.
11. P802.1Q-Rev/D0.5 Comment Resolution. Mick Seaman, P802.1Q-Rev editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/q-rev-drafts/d0/802-1Q-rev-d0-5.pdf.
    Disposition: Partial disposition. https://www.ieee802.org/1/files/private/q-rev-drafts/d0/802-1Q-rev-d0-5-pdis-v1.pdf.
12. Liaisons:
    - The Maintenance TG Chair presented the incoming liaison from ITU-T SG2 in https://www.ieee802.org/1/files/public/docs2021/liaison-itu-t-sg2-LS190-8021Dwithdrawal-0621.pdf.
    - The Maintenance TG Chair presented the incoming liaison from ITU-T SG5 in https://www.ieee802.org/1/files/public/docs2021/liaison-itu-t-sg5-LS219-inclusivelanguage-0621.pdf.

- The Maintenance TG Chair presented the incoming liaison from ITU-T SG9 in https://www.ieee802.org/1/files/public/docs2021/liaison-SG9-LS141-8021Dwithdrawal-0521.pdf.
- Karen Randall led the drafting of a response to previous incoming liaison from ITU-T SG11 in https://www.ieee802.org/1/files/public/docs2021/liaison-SG11-LS186-8021Dwithdrawal-0421.pdf.

Disposition:
- ITU-T SG2, SG5 and SG9 incoming liaisons were presented for information.
- ITU-T SG11 liaison response drafted and finalized as https://www.ieee802.org/1/files/public/docs2021/liaison-response-itu-t-sg11-8021Dwithdrawal-0721-v01.pdf.

13. SC6 Status. Karen Randall presented "ISO/IEC JTC1 SC6 STATUS July 2021" slides in "Maintenance Task Group Electronic Meetings" https://www.ieee802.org/1/files/public/docs2021/maint-congdon-concall-0721-1-v01.pdf.
Disposition: For information.

15:59 ET recess

Call to order July 19, 2021 at 14:00 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

14. The Maintenance TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1 and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
15. P802.1ASdr Editor Report. Silvana Rodrigues, P802.1ASdr editor, presented "802.1ASdr Editor's Update" https://www.ieee802.org/1/files/public/docs2021/dr-rodrigues-editors-update-0721-v00.pdf.
Disposition: For information.
16. P802.1BA-Rev/D1.0 Updated final comment resolution. David McCall, P802.1BA-Rev editor, led the resolution of comments received on https://www.ieee802.org/1/files/private/ba-rev-drafts/d1/802-1BA-Rev-d1-0.pdf.
Disposition: Final disposition. https://www.ieee802.org/1/files/private/ba-rev-drafts/d1/802-1BA-Rev-d1-0-dis-v02.pdf.
17. P802.1Q-Rev/D0.5 Comment Resolution. Mick Seaman, P802.1Q-Rev editor, continued leading the resolution of comments received on https://www.ieee802.org/1/files/private/q-rev-drafts/d0/802-1Q-rev-d0-5.pdf.
Disposition: Partial disposition. https://www.ieee802.org/1/files/private/q-rev-drafts/d0/802-1Q-rev-d0-5-pdis-v2.pdf.
18. New Maintenance Items: The TG chair led the discussion of the following new maintenance items:
- 0331: incorrect value for the meanLinkDelay when CMLDS is used
- 0332: NewInfo not set TRUE in PortStateSettingExt state machine

Disposition: Details for discussion on all items are logged in the IEEE 802.1 maintenance database at https://www.802-1.org/home where items progressed at the meeting can be reviewed by selecting 'Meetings'.
19. Any Other Business. No other business was discussed by the Maintenance TG in this session.
20. Future meetings. Agreed (informally, none dissenting) to hold an electronic meeting of the Maintenance TG to finalize P802.1Q-Rev/D0.5 comment resolution and discuss maintenance requests on Jul 29, 2021 at 11:00 ET. https://1.ieee802.org/maintenance-tg-electronic-meeting-agenda-july-29-2021-11-am-et/.

16:14 ET adjournment

5 Security Task Group

Between this session and the preceding session, the IEEE 802.1 Security Task Group (Security TG) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the Security TG meeting held 2021-06-01 13:05 - 14:24 ET (revised) https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=332208
- Minutes of the Security TG meeting held 2021-06-22 13:01 - 14:15 ET (revised) https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=333174

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Call to order Jul 13, 2021 at 11:00 ET by Mick Seaman, IEEE 802.1 Security TG Chair, who presided and wrote the minutes assisted by Karen Randall, Security TG Vice-Chair.

Agenda items and dispositions:
1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
   The Security TG Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   The Security TG Chair made the Calls for Potentially Essential Patents thereby providing 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: there were no responses to these Calls prior to the end of the session.
   The Security TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The Security TG Chair presented the agenda in https://1.ieee802.org/july-2021-plenary-session-electronic-security-agenda/
   Disposition: the agenda was reviewed, discussed and updated as recorded by these minutes.
   Question re potential discussion of liaison from the Wireless Broadband Alliance (WBA) concerning Random and Changing MAC Addresses (RCM): liaison is expected but not yet received, so no discussion at this session.
3. P802.1AEdk MAC Privacy protection. Don Fedyk, P802.1AEdk Editor, led a discussion of comments received on the Task Group ballot of P802.1AEdk. An initial proposed disposition of comments, listing the comments received on https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7.pdf, had been posted at https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7-pdis00.pdf
   Resolution started with comments identified by the Editor for initial discussion. Proposed or final responses to comments were recorded (as usual) in an updated proposed disposition of comments made available after the close of the session at https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7-pdis02.pdf.
   Extended discussion took place on the following comments (identified in these minutes by the comment numbers in the proposed disposition) beyond that recorded in the proposed disposition:

- #101. Discussion of data structures, no need for user priority in table because it is just an index. Small amount of information indexed, no need to reference through a layer of indirection when describing the behavior of the implementation (frame transmitted with a given value of user priority). YANG preferences is a separate issue. Decision to reorganize tables and terminology.
- #131. Updates #101 suggested remedy. No need to force drop eligible clear for privacy protected individual frames, although this might be desired to avoid disclosing/identifying excess traffic. Provide a drop eligible hide/privacy control (downside of hiding is of course placing conformant traffic at risk).
- #32. Suggestion of random padding. Adequate RNG at per packet rates not believed economically feasible. Typically high rates accommodated by pseudo-random number generation, which can itself provide a tracking/identifying method (e.g. as in the extensive privacy discussion of the 802.11 scrambler seed).
- #33. Fragmented frames interspersed with unprotected frames – capability already described.
- #135. Timeliness requirements both on frame delay through MACsec (as previously described) and on how long before an encapsulating MPPDU is transmitted can the decision be made as to what the contents should be – in other words how late can a highest priority frame be made available and still be encapsulated in the very next MPPDU. Wide range of usage scenarios and speeds, from single site TSN to global and satellite communication. Probably needs text soliciting implementation characterization by vendor so customer can assess use case suitability.

Needs work.
Disposition: Further discussion needed.

13:01 ET recess

Call to order Jul 15, 2021 at 11:12 ET by Mick Seaman, IEEE 802.1 Security TG Chair who presided and wrote the minutes assisted by Karen Randall, Security TG Vice-Chair.

The Security TG Chair showed "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf, announced that this ad hoc meeting remains subject to the Policies mentioned in agenda item 1, repeated the call for patents, and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

3. Don Fedyk, P802.1AEdk Editor, continued the discussion of comments received in the Task Group ballot on https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7.pdf, recording final and proposed responses. Extended discussion of the following comments:
   - #21 regarding MAC proxies (RFC from IETF). Translation of MAC addresses by a proxy in the wired network, back hauling wireless access, with privacy as a goal. No impact on MACsec (or on MAC Privacy protection over MACsec) where the scope of MACsec is hop by hop terminated at the proxy point. However will change MAC address and therefore remove data origin authenticity (and cause validation failure) if MACsec "hop" is intended to protect across the region including the proxy. Would cause key lookup failure where source address is part of the key index (SAK) operation, which is MACsec option. Basic question as to whether the "proxy" is viewed as trustworthy given increased focus on privacy intrusion by services that a person intentionally uses (as opposed to an unknown adversary).

Not compatible with a recently advocated use case of MACsec as a further independent layer of security over wireless access.

- #34. Further consideration regarding Annex I PTP for high precision time stamping. Work elsewhere in 802.1 should be focused on the use of 802.3cx reference point and MII delay specification. Follow up on the definition of the timestamping point when that work has progressed.
- #4. It would be useful to capture the (small) subset of UML used. UML notation for optional should be (for example) 0..1. Desirable to add this to figures.
- #85. While the Security TG has a related contribution there is some way to go from contribution to document text. In the absence of a definite plan to develop text regarding bandwidth use with Privacy (some loss, some gain where multiple small frames are encapsulated, removing inter-frame gap), need to let this go.

Disposition: Further discussion needed.

12:50 ET recess

Call to order Jul 16, 2021 at 11:12 ET by Mick Seaman, IEEE 802.1 Security TG Chair who presided and wrote the minutes assisted by Karen Randall, Security TG Vice-Chair.

The Security TG Chair showed "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf, announced that this ad hoc meeting remains subject to the Policies mentioned in agenda item 1, repeated the call for patents, and asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

3. Don Fedyk, P802.1AEdk Editor, continued the discussion of comments received on the Task Group ballot on https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7.pdf, recording final and proposed responses. Extended discussion of the following comments:
   - #33. Reviewed again. Interspersing protected and unprotected frames on transmission. Security TG chair will provide text.
   - #42. MIB has counters that are not in YANG model. Have to check that these counters were deprecated.
   - #44. Annex needs to capture MIB and YANG differences. Structures should be aligned where possible (#46).
   - #130. Call the padding of individual Privacy Frames "Privacy Frame Padding".
   - #135, 136, 138. Bound the encoding delay.

   Disposition: Updated proposed disposition of comments is at https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7-pdis02.pdf.
   The Security TG Chair, as 802.1AE editor, will begin the process of integrating text into the IEEE Std 802.1AE base, with the objective of minimizing surprises/difficulty in the eventual roll-up of the amendment and ensuring terminology use if aligned. Further comments on the draft are welcome, to help drive the process. If ready for WG ballot before November 2021, will do an ePoll.

4. Any other business. A YANG Data Model for a Keystore RFC in NETCONF Working Group is in WG last call and gives recommendations for key storage/accessibility of 802.1AR (built-in keys) which appear to override and conflict with/miss the point of 802.1AR recommendations. Reference to 802.1AR needs to be updated to 802.1AR. Need to develop a liaison and contact other security experts who may not be following this NETCONF work.

5. Future meetings. Security TG electronic meetings would be scheduled for Aug 3, 2021 13:00 ET and Aug 17, 2021 13:00 ET. Agenda: P802.1AEdk draft development and task group matters arising.

12:59 ET adjournment

6 Time-Sensitive Networking Task Group

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on generic TSN topics whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-05-10 11:00 - 13:00 ET (revised)
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=225583
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-05-17 11:00 - 13:00 ET (revised)
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=226507
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-06-07 11:00 - 13:09 ET (revised)
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=229940
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-06-14 11:00 - 13:02 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=240767
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-06-21 11:00 - 13:00
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=319722
- Minutes of the IEEE 802.1 TSN TG meeting held 2021-06-28 11:00 - 13:00
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=321534

Between this session and the preceding session, the IEEE 802.1 TSN TG held electronic meetings on P802.1DG whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEEE P802.1DG meeting held 2021-05-11 9:00 - 11:01 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=173254
- Minutes of the IEEE P802.1DG meeting held 2021-05-18 9:00 - 10:56 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=183882
- Minutes of the IEEE P802.1DG meeting held 2021-06-01 9:00 - 11:02 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=207412
- Minutes of the IEEE P802.1DG meeting held 2021-06-08 9:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=232724
- Minutes of the IEEE P802.1DG meeting held 2021-06-15 9:00 - 10:46 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=243719
- Minutes of the IEEE P802.1DG meeting held 2021-06-29 9:00 - 11:01 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=266962

Between this session and the preceding session, the IEEE 802.1 TSN TG held electronic meetings on P802.1DP/SAE AS 6675 whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2021-05-26 10:00 - 11:56 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=221523
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2021-06-23 10:00 - 12:01 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&D=0&F=P&P=259306&F=

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

The TSN TG and the IEC/IEEE 60802 Joint Project held joint meetings minuted in section 6.1.

Call to order Jul 12, 2021 at 14:30 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
    The TSN TG Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
    The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The TSN TG Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/.
    Disposition: The agenda was reviewed, discussed and updated as recorded by these minutes.
3. Thomas Weichlein presented "Response on the liaison response on the use of faster CCM transmission intervals in IEC 62439-2" https://www.ieee802.org/1/files/public/docs2021/liaison-iec65cwg15-CCM_interval_extension-0621.pdf.
    Disposition: Liaison discussed.
4. The TSN TG Chair presented "LS/r on use of inclusive language in 3GPP specifications (reply to IEEE 802.1-Working Group - LS62)" https://www.ieee802.org/1/files/public/docs2021/liaison-itu-t-sg5-LS219-inclusivelanguage-0621.pdf.
    Disposition: Liaison discussed.
5. The TSN TG Chair presented the liaison from IOWN Global Forum in https://www.ieee802.org/1/files/public/docs2021/liaison-IOWNGF-techoutlook-0521.pdf.
    Disposition: Liaison discussed.
6. The TSN TG Chair presented "Information on the strategy chosen by the BBF to bind the IEEE 802.1Qcx CFM YANG model to the IETF RFC 8632 Alarm Management YANG model to support BBF access node requirements" https://www.ieee802.org/1/files/public/docs2021/liaison-BBF-strategytobindQcxtoIETFalarmmgmtmodel-0721.pdf.
    Disposition: Liaison discussed. Liaison response to be drafted in YANGsters.
7. Nader Zein presented "Publication of Wireless Backhaul Network and Services Automation: SDN SBI YANG models" https://www.ieee802.org/1/files/public/docs2021/liaison-etsi-ISGmWT-SDNSBIYANG-0721.pdf.
    Disposition: Liaison discussed. Liaison response to be drafted in YANGsters.
8. The TSN TG Chair presented on behalf of the P802.1CBdb editor the final disposition in https://www.ieee802.org/1/files/private/db-drafts/d1/802-1CBdb-d1-5-dis-v01.pdf and "802.1CBdb/D1.5 Editor's report of the 4th WG recirculation ballot" https://www.ieee802.org/1/files/public/docs2021/db-mangin-d1-5-editors-report-0721-v01.pdf.
    Disposition: For information.

9. The TSN TG Chair presented draft motions for the 802.1 closing plenary approval.
    Disposition: Draft motions reviewed for 802.1 closing plenary approval.

16:39 ET recess

Call to order Jul 13, 2021 at 09:00 ET by Craig Gunther, IEEE 802.1 TSN TG Vice-Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

10. The TG Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TG Vice-Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    The TG Vice-Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
11. Max Turner presented "IEEE802.1DG – SHAPERS"
    https://www.ieee802.org/1/files/public/docs2021/dg-turner-Latency-0721-v01.pdf.
    Disposition: Presentation discussed. More discussion needed.

11:06 ET recess

Call to order Jul 14, 2021 at 09:00 ET by Craig Gunther, IEEE 802.1 TSN TG Vice-Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

12. The TG Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TG Vice-Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    The TG Vice-Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
13. Norman Finn presented "Determining Priority Flow Control Headroom"
    https://www.ieee802.org/1/files/public/docs2021/cz-finn-pfc-headroom-0629-v01.pdf.
    Disposition: Presentation discussed. More discussion needed.
14. Lily Lv presented "PFC Headroom Measurement and Calculation Project Proposal"
    https://www.ieee802.org/1/files/public/docs2021/new-lv-PFC-Headroom-Project-Proposal-0721-v01.pdf.
    Disposition: Presentation discussed. 802.1 closing plenary meeting motion to be prepared.
15. Scott Mansfield, P802.1ABcu editor, presented
    https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0-pdis-v01.pdf and led the resolution of comments received on https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0.pdf.
    Disposition: Partial disposition. Comments 40, 28, 29, 30, 2, 3, 1, 34 discussed and resolved as documented in https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0-dis-v01.pdf.

11:08 ET recess

Call to order Jul 14, 2021 at 11:30 ET by János Farkas, IEEE 802.1 TSN TG Chair. Abdul Jabbar and János Farkas, IEEE P802.1DP/SAE AS6675 joint project co-Chairs, presided. Marina Gutiérrez, IEEE P802.1DP/SAE AS6675 Secretary, wrote the minutes.

16. János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
17. Approval of agenda. János Farkas, IEEE 802.1DP/SAE AS6675 co-Chair, presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_P8021DPAS6675.
    Disposition: The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.
18. Brent Nelson presented "ARINC 664p7 Traffic Shaping Features" https://www.ieee802.org/1/files/public/docs2021/dp-Nelson-A664p7-Traffic-Shaping-0721-v01.pdf.
    Disposition: More discussion needed.

13:35 ET recess

Call to order Jul 14, 2021 at 14:02 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

19. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
20. Stephan Kehrer, P802.1Qdj editor, presented "IEEE P802.1Qdj Editor's report Draft D0.2" https://www.ieee802.org/1/files/public/docs2021/dj-kehrer-editors-update-d0-2-0721-v01.pdf.
    Disposition: Presentation discussed. Anticipated next: Draft 0.2 for TG balloting.
21. Rodrigo Ferreira Coelho presented "Communication Requirements for Industrial Automation" https://www.ieee802.org/1/files/public/docs2021/dj-Coelho-CNC-Requirements-0721-v02.pdf.
    Disposition: Presentation discussed. More discussion needed.

16:13 ET recess

Call to order Jul 15, 2021 at 09:00 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

22. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

23. Don Pannell presented "It is time to support 10BASE-T1S in IEEE 802.1AS-2020" https://www.ieee802.org/1/files/public/docs2021/new-pannell-Time2Support10BASET1S-in-AS-0721-v02.pdf.
Disposition: Presentation discussed. 802.1 closing plenary meeting motion to be prepared.

24. Maik Seewald and Malcolm Smith presented "Configuration Enhancements for Wireless TSN" https://www.ieee802.org/1/files/public/docs2021/dj-seewald-wireless-tsn-0721-v01.pdf.
Disposition: Presentation discussed. More discussion needed.

25. The TSN TG Chair led the discussion of comments https://www.ieee802.org/1/files/public/docs2021/cw-PAR-extension-comments-0721-v00.pdf received on https://www.ieee802.org/1/files/public/docs2021/cw-PAR-extension-0721-v00.pdf.
Disposition: Comments resolved in https://www.ieee802.org/1/files/public/docs2021/cw-PAR-extension-comments-0721-v01.pdf. Updated PAR: https://www.ieee802.org/1/files/public/docs2021/cw-PAR-extension-0721-v01.pdf.

26. The TSN TG Chair led the discussion of comments https://www.ieee802.org/1/files/public/docs2021/cj-PAR-extension-comments-0721-v00.pdf received on https://www.ieee802.org/1/files/public/docs2021/cj-PAR-extension-0721-v00.pdf.
Disposition: Comments resolved in https://www.ieee802.org/1/files/public/docs2021/cj-PAR-extension-comments-0721-v01.pdf. Updated PAR: https://www.ieee802.org/1/files/public/docs2021/cj-PAR-extension-0721-v01.pdf.

11:05 ET recess

Call to order Jul 15, 2021 at 14:03 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

27. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

28. Max Turner presented "IEEE802.1ASDM – REDUNDANCY" https://www.ieee802.org/1/files/public/docs2021/dm-turner-ASredundancy-0721-v02.pdf.
Disposition: Presentation discussed. More discussion needed.

29. Geoffrey Garner, P802.1ASdm editor, presented "P802.1ASdm-Rev/D0.2 Editor's Report" https://www.ieee802.org/1/files/public/docs2021/dm-garner-d0-2-tg-ballot-editors-report-0521-v09.pdf and led the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2.pdf.

Disposition: Partial disposition. Comments 44, 144, 149, 150, 27, 28, 32, 34 discussed and resolved as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2-pdis-v10.pdf.

16:04 ET recess

Call to order Jul 15, 2021 at 16:05 ET by Jessy Rouyer, IEEE 802.1 Vice-Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

30. The 802.1 Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The 802.1 Vice-Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
31. Jessy Rouyer led the review of a draft IEEE SA Beyond Standards blog post on IEEE Std 802.1CM and 802.1's 2020 IEEE SA Emerging Technology Award.
    Disposition: Draft text reviewed and updated. Recommend 802.1 closing plenary meeting motion be prepared.

17:37 ET recess

Call to order Jul 16, 2021 at 09:00 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

32. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
33. The TSN TG Chair showed the draft IEEE SA Beyond Standards blog post reviewed in the TSN ad hoc meeting held Jul 15, 2021 at 16:05 ET.
    Disposition: Request for participants to further review before the 802.1 closing plenary meeting. 802.1 closing plenary meeting motion to be prepared.
34. Johannes Specht presented maintenance item 311 "802.1Q: Resolution of stream filters with wildcard stream_handle specification" https://www.802-1.org/items/424.
    Disposition: Maintenance item discussed. Maintenance database updated with proposed next steps.
35. Norman Finn, P802.1DC editor, shared his anticipation of the project's next step.
    Disposition: For information. Anticipated next: Further ballot for Sep resolution.
36. Hiroki Nakano presented "P802.1Qdq (assuming the approval of the PAR) Text Contribution" https://www.ieee802.org/1/files/public/docs2021/dq-itaya-cas-text-contribution-0721-v1.pdf.
    Disposition: Contribution discussed. 802.1 closing plenary meeting motion to be prepared.
37. Johannes Specht presented "On non-FIFO Queues" https://www.ieee802.org/1/files/public/docs2021/new-specht-non-fifo-queues-0721-v01.pdf.
    Disposition: Presentation discussed. More discussion needed.

11:17 ET recess

Call to order Jul 16, 2021 at 11:31 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

38. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
39. Feng Chen, P802.1Qdd editor, presented "IEEE P802.1Qdd Resource Allocation Protocol (RAP) - Preview of Draft 0.5" https://www.ieee802.org/1/files/public/docs2021/dd-chen-D0-5-preview-0721-v01.pdf.
    Disposition: Presentation discussed.
40. Alexej Grigorjew presented "Traffic Specification Types in Qdd" https://www.ieee802.org/1/files/public/docs2021/dd-grigorjew-tspec-types-0721-v01.pdf.
    Disposition: Presentation discussed. More discussion needed.
41. Jordon Woods presented "Making BMCA and Domain 0 optional" https://www.ieee802.org/1/files/public/docs2021/60802-woods-Making-BMCA-optional-0721-v01.pdf.
    Disposition: Presentation discussed. More discussion needed.

13:54 ET recess

Call to order Jul 19, 2021 at 09:00 ET by Craig Gunther, IEEE 802.1 TSN TG Vice-Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

42. The TG Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TG Vice-Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call.
    The TG Vice-Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
43. Scott Mansfield, P802.1ABcu editor, continued the resolution of comments received on https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0.pdf.
    Disposition: Final **Disposition:** https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0-dis-v01.pdf
44. Geoffrey Garner, P802.1ASdm editor, continued leading the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2.pdf.
    Disposition: Partial disposition. Comments 139, 140, 142, 143, 147, 98, 101, 106, 108, 109 discussed and resolved as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2-pdis-v10.pdf.
45. Scott Mansfield, P802.1ABcu editor, continued the resolution of comments received on https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0.pdf.
    Disposition: Several comment dispositions reviewed. Final **Disposition:** https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-d2-0-dis-v01.pdf
46. Geoffrey Garner, P802.1ASdm editor, continued leading the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2.pdf.
    Disposition: Partial disposition. Comment 89 discussed and resolved as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2-pdis-v10.pdf.

11:09 ET recess

Call to order Jul 19, 2021 at 11:30 ET by Janos Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

47. The TSN TG Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
48. Roger Marks, P802.1CQ editor, presented https://www.ieee802.org/1/files/private/cq-drafts/d0/802-1CQ-d0-6.pdf.
    Disposition: Draft discussed. Anticipated next: TG balloting
49. Roger Marks, P802.1CQ editor, led the review of a draft "Liaison regarding IEEE P802.1CQ draft" to IEEE 1722 and IEEE 1722.1.
    Disposition: Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.
50. Scott Mansfield, YANGsters Chair, led the review of a draft "Liaison response to LS469: strategy to bind IEEE 802.1Qcx to IETF Alarm Mgmt model supporting BBF reqts".
    Disposition: Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.
51. Scott Mansfield, YANGsters Chair, led the review of a draft "Liaison response to mWT(21)019027 Publication of Wireless Backhaul Network and Services Automation: SDN SBI YANG models".
    Disposition: Draft liaison reviewed and updated. 802.1 closing plenary meeting motion to be prepared.
52. The TSN TG Chair showed the draft IEEE SA Beyond Standards blog post reviewed in the TSN ad hoc meeting held Jul 15, 2021 at 16:05 ET.
    Disposition: 802.1 closing plenary meeting motion to be prepared.
53. Geoffrey Garner, P802.1ASdm editor, continued leading the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2.pdf.
    Disposition: Partial disposition. Comment 83 discussed and resolved as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-2-pdis-v10.pdf.

13:31 ET adjournment

6.1 IEC/IEEE 60802 Joint Project

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-05-10 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=192774
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-05-17 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=193743
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-06-07 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=238349
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-06-14 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=247843
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-06-21 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=255393

- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2021-06-28 9:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=264516

Between this session and the preceding session, the IEC/IEEE 60802 Joint Project System Specification ad hoc (System ad hoc) held the following electronic meetings:
- Minutes of the IEC/IEEE 60802 Joint Project System Specification ad hoc meeting held 2021-05-21 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=269649
- Minutes of the IEC/IEEE 60802 Joint Project System Specification ad hoc meeting held 2021-06-11 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=270601
- Minutes of the IEC/IEEE 60802 Joint Project System Specification ad hoc meeting held 2021-06-18 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=271553
- Minutes of the IEC/IEEE 60802 Joint Project System Specification ad hoc meeting held 2021-06-25 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=260439
- Minutes of the IEC/IEEE 60802 Joint Project System Specification ad hoc meeting held 2021-07-09 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&O=A&P=274297

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Call to order Jul 12, 2021 at 11:30 ET by Ludwig Winkel, IEC 65C/WG18 Convenor and IEC/IEEE 60802 Joint Project Chair (60802 Chair), who presided with János Farkas, IEEE 802.1 TSN TG Chair (TSN TG Chair). Josef Dorr, IEC/IEEE 60802 Joint Project Secretary (60802 Secretary), wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction and other administrative items. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf.
   The TSN TG Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the session.
   The 60802 Chair explained that the IEC/IEEE 60802 Joint Project also follows the usual IEC patent https://www.iec.ch/members_experts/tools/patents/patent_policy.htm and copyright https://www.iec.ch/standardsdev/resources/draftingpublications/overview/rules_requirements/copyright.htm policies.
   The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802.
    Disposition: The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.
3. Security Slice. Oliver Pfaff presented an outline of the security related agenda items of this meeting https://www.ieee802.org/1/files/public/docs2021/60802-Pfaff-et-al-Security-Slice-Outline-0721-v01.pdf.
    Disposition: For information.
4. Briefing on IEC/IEEE 60802 Security. Andreas Furch provided an overview of the contributors' work on IEC/IEEE 60802 security with "Briefing on IEC/IEEE 60802 Security" https://www.ieee802.org/1/files/public/docs2021/60802-Pfaff-et-al-Briefing-on-60802-security-0721-v01.pdf. The 1st revision of the Security concept for IEC/IEEE 60802 focuses on securing network configuration.
    Disposition: More discussion needed.
5. Incorporating Requirements from IEEE 802.1AR and IETF NETCONF/YANG. Oliver Pfaff and Kai Fischer presented the security concept for IEC/IEEE 60802 based on IEEE 802.1AR and NETCONF/YANG with "Incorporating Requirements from IEEE 802.1AR and IETF NETCONF/YANG" https://www.ieee802.org/1/files/public/docs2021/60802-Pfaff-et-al-Incorporating-8021AR-NETCONF-YANG-0721-v01.pdf. Kai Fischer led the discussion of questions to Security TG members shown on slide 17 of the presented contribution.
    Disposition: More discussion needed.

13:30 ET recess

Call to order Jul 13, 2021 at 11:30, by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

6. The TSN TG and 60802 Chairs announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the session.
    The TSN TG Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
7. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-2.
    Disposition: The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.
8. System ad hoc update. Mark Hantel, IEC/IEEE 60802 Joint Project System Specification ad hoc Chair (System ad hoc Chair), presented a report of the System ad hoc's work and status https://www.ieee802.org/1/files/public/docs2021/60802-Hantel-System-Adhoc-Update-0721-v01.pdf.
    Disposition: For information.
9. Update on the IEC 61802 conformity assessment project. The 60802 Chair gave a verbal update on the IEC 61802 conformity assessment project. The negotiations to sponsor IEC 61802 development between five involved consortia are still ongoing. An editor for the project is not appointed yet.
    Disposition: For information.

10. Editor's report on Draft 1.3. Jordon Woods, IEC/IEEE 60802 Joint Project Editor (60802 Editor), provided an Editor's Report on the status of the upcoming 60802 Draft 1.3 with "Editor's Report 60802 Draft 1.3" https://www.ieee802.org/1/files/public/docs2021/60802-woods-D1-3-update-0721-v01.pdf.
    Disposition: More discussion needed. The question of whether a profile can "override" a mandatory feature of a base standard is to be discussed as agenda item "Making BMCA and Domain 0 optional" on the Friday Jul 16, 2021 TSN TG meeting.
11. Geoffrey Garner presented "Analysis of Constant Time Error Accumulation and Budgeting in an IEC/IEEE 60802 Network" https://www.ieee802.org/1/files/public/docs2021/60802-garner-analysis-of-cTE-and-budgeting-in-60802-network-0721-v00.pdf.
    Disposition: More discussion needed. The discussion of next simulation steps was postponed to the IEC/IEEE 60802 meeting on Jul 14, 2021.
12. Review of minutes. This agenda item was skipped by lack of time.

13:45 ET recess

Call to order Jul 14, 2021 at 9:00 ET, by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

13. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The 60802 Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the session.
    The 60802 Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
14. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-3.
    Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
15. Karl Weber presented and led the discussion on the "LNI 4.0 Approach for Production Lines" https://www.ieee802.org/1/files/public/docs2021/60802-Weber-LNI40-ApproachProductionLine-0721-v01.pdf.
    Disposition: More discussion is needed.
16. Meeting industrial requirements for time sync. Mark Hantel presented "60802 Sync Applications" https://www.ieee802.org/1/files/public/docs2021/60802-Hantel-Sync-Applications-0721-v01.pdf and "60802 Time Sync Temperature Ramp Range" https://www.ieee802.org/1/files/public/docs2021/60802-Hantel-Sync-Temperature-Rates-0721-v01.pdf.
    - The suggested approach and the proposed work related to a different temperature ramping and range were discussed.
    Disposition: More discussion is needed.
17. Analysis of Constant Time Error Accumulation and Budgeting in an IEC/IEEE 60802 Network – next simulation step. It was agreed (informally, none dissenting) to run multiple replications of case 16 / subcase 10 as next simulation step.
18. Review of minutes. This agenda item was skipped by lack of time.

11:15 ET recess

Call to order Jul 15, 2021 at 11:30 ET by Ludwig Winkel, 60802 Chair, who presided. Josef Dorr, 60802 Secretary, wrote the minutes.

19. The TSN TG and 60802 Chairs announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The TSN TG Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the session.
    The 60802 Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
20. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-4.
    Disposition: The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.
21. Bridged End Station Management model. Josef Dorr presented "IA Device Management Model supporting Bridged End Stations" https://www.ieee802.org/1/files/public/docs2021/60802-Dorr-IA-Device-Mgmt-Model-0721-v01.pdf.
    Disposition: Josef Dorr is to provide an updated revision of the related text contribution https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-Dorr-OPC-FLC-with-IADeviceModel-0621-v01.pdf. More discussion needed.
22. János Farkas presented and led the discussion on "TSN network configuration entity" https://www.ieee802.org/1/files/public/docs2021/60802-farkas-tsn-network-configuration-entity-0721-v01.pdf.
    Disposition: More discussion needed.
23. Norman Finn presented "Introduction to Connectivity Fault Management" https://www.ieee802.org/1/files/public/docs2021/60802-finn-intro-to-CFM-0721-v01.pdf.
    Disposition: For information.
24. Review of minutes. This agenda item was skipped by lack of time.

13:45 ET recess

Call to order Jul 16, 2021 at 09:00 ET by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

25. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The 60802 Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the session.
    The 60802 Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
26. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-5.
    Disposition: The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.

27. Geoffrey Garner presented "Initial Consideration of Tolerance Requirement Related to neighborRateRatio measurement in an IEC/IEEE 60802 Network" https://www.ieee802.org/1/files/public/docs2021/60802-garner-init-consid-tolerance-requirement-60802-network-0721-v00.pdf.
    - It was mentioned that the tolerance test should be based on the accumulated error not the Grandmaster error alone.
    - Tests in the full environment of a relay instance (e.g., temperature, traffic load) might be considered as well.
    - The relay instance test should include the time provided by the relay itself.
    Disposition: More discussion needed. Contributions on the discussed topics are welcome.
28. Jordon Woods presented "The use of one-step clocks in 60802 Networks" https://www.ieee802.org/1/files/public/docs2021/60802-woods-onestep-in-60802-0721-v01.pdf.
    - It was clarified that one-step and two-step implementations are interoperable because all implementations must support one-step on receipt.
    Disposition: More discussion needed.
29. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

11:06 ET recess

Call to order Jul 19, 2021 at 09:00 ET by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

30. The 60802 Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
    The 60802 Chair made the Call for Potentially Essential Patents thereby providing 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: there were no responses to this Call prior to the end of the session.
    The 60802 Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
31. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2021-07-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802-6.
    Disposition: The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented.
32. Planning summer meetings. The 60802 Chair noted that weekly meetings during Aug and Sep may be cancelled in due time if there are no contributions announced to the 60802 Chair a week before the meeting.
    Disposition: For information.
33. János Farkas presented and led the discussion of "Consistent VID to MSTID Allocation" https://www.ieee802.org/1/files/public/docs2021/60802-farkas-consistent-VID-to-MSTID-allocation-0721-v01.pdf.
    - The proposal was made to mandate in IEC/IEEE 60802 MSTP support limited to only two MSTIDs for IST and TE-MSTID. This proposal needs more detailed analysis.
    Disposition: More discussion needed.

34. János Farkas presented and led the discussion of "Inter-domain considerations" https://www.ieee802.org/1/files/public/docs2021/new-farkas-inter-domain-considerations-0721-v01.pdf.
    Disposition: More discussion is needed.
35. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

10:36 ET adjournment

7 Nendica

Between this session and the preceding session, the IEEE 802 "Network Enhancements for the Next Decade" Industry Connections Activity (Nendica) held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:

- Minutes of the Nendica meeting held 2021-05-13 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;d42a47a4.21
- Minutes of the Nendica meeting held 2021-05-20 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;73f473d7.21
- Minutes of the Nendica meeting held 2021-05-27 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;9b458885.21
- Minutes of the Nendica meeting held 2021-06-03 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4552cbcb.21
- Minutes of the Nendica meeting held 2021-06-10 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;9a3aeee7.21
- Minutes of the Nendica meeting held 2021-06-17 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;dfffa0b9.21
- Minutes of the Nendica meeting held 2021-06-24 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bb912799.21
- Minutes of the Nendica meeting held 2021-07-01 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bb912799.21
- Minutes of the Nendica meeting held 2021-07-08 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bce05a90.21

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Call to order July 15, 2021 at 09:00 ET by Roger Marks, Nendica Chair, who presided and wrote the minutes.

Agenda items and dispositions:

1. Meeting introduction and other administrative items. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" "http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf".
   The Nendica Chair showed this presentation advising that the following, provided beforehand, applies:
   - IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;

- Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy.

The Nendica Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.

2. Approval of agenda. The Nendica Chair presented the draft agenda.
   Disposition: The agenda was reviewed, discussed, and agreed (informally, none dissenting) as presented, then posted as https://mentor.ieee.org/802.1/dcn/21/1-21-0043-00-ICne.pdf.

3. Update. The Nendica Chair noted the Nendica web site and the new documents available at the Nendica mentor server.

4. Minutes. The Nendica Chair reviewed the draft "Minutes of the Nendica meeting held 2021-07-08 09:00-11:00 ET (revised)" https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bce05a90.21.
   Disposition: It was agreed (informally, none dissenting) to approve the minutes as presented.

5. Nendica organization.
   The Nendica Chair noted that progress on renewal of the Nendica ICAID continues to track the schedule. He noted that he had attended PAR/ICAID review meetings of the 802.3 and 802.15 WGs and that he had presented a Nendica status report https://mentor.ieee.org/802.1/dcn/21/1-21-0040-01-ICne.pdf to the 802.19 and 802.15 WGs and would present the same to 802.3 after the Nendica meeting. Only one comment had been received on the ICAID as of the deadline, which was two hours before the meeting. The comment asked for finalization of the highlighted TBD items. The Nendica Chair noted that he had submitted, on Jul 9, 2021, updates to the draft ICAID proposal and draft ICAID report in order to finalize the TBDs. These documents were reviewed, and the meeting agreed (informally, none dissenting) to further update both of them.

   - Motion: "agree to forward Nendica ICAID [Draft Nendica ICAID Renewal] https://mentor.ieee.org/802.1/dcn/21/1-21-0011-07-ICne.docx and Nendica Report [Draft Nendica ICCom Report] https://mentor.ieee.org/802.1/dcn/21/1-21-0012-04-ICne.pptx to IEEE 802.1 WG"
     - Mover: Nikolich
     - Seconder: Winkel

   Disposition: The Nendica Chair agreed to notify the 802.1 Chair and WG reflector of the request for approval, inviting individuals to request addition of their name to the ICAID participant list in section 8.3 prior to 802.1 WG action.

6. Stream and Flow Interworking (SFI) Work Item. Roger Marks, SFI Work Item Editor, indicated an expectation of proposing the termination of this Work Item in a future Nendica meeting.

7. Data Center Networks (DCN) Work Item. Paul Congdon, DCN Work Item Editor, noted that IEEE published "IEEE 802 Nendica Report: Intelligent Lossless Data Center Networks" on Jun 22, 2021 and that a flaw in IEEE's publication page had been corrected by IEEE staff. A spelling error in participant's name in the report has been flagged to IEEE staff. A draft social media message was reviewed for the IEEE 802 Public Visibility effort, with no comment. Paul Congdon will be presenting a webinar that will discuss aspects of the report.

Disposition: The Nendica Chair agreed to forward the draft social media message to the 802 Public Visibility Standing Committee.

8. Study Items.

   (A) Cut-Through Forwarding (CTF) Study Item.

   - The CTF Study Item was, without objection, deferred until the completion of agenda item 10. Regarding the CTF Study Item, Johannes Specht, CTF leader, discussed approaches to re-recording the tutorial for distribution. The option to record privately with Webex and distribute via YouTube was considered; IEEE rules for distribution would need to be determined. The Nendica Chair noted that, following up his action from the preceding week's Nendica meeting, he had contacted IEEE Educational Activities about providing a home for the video and learned that it would be possible but that the typical format would be a presentation before another live audience, with the recording available from IEEE SA on demand. Three questions arose: (1) how soon could IEEE Educational Activities schedule the presentation; (2) could the recording be made available via YouTube; (3) could the existing slide set be used.
     Disposition: The Nendica Chair agreed to contact IEEE staff and learn more.

   - Johannes Specht, CTF leader, reviewed his contributions "CTF Tutorial - comments/responses" https://mentor.ieee.org/802.1/dcn/21/1-21-0042-01-ICne.pdf and "CTF tutorial follow-up slides" and https://mentor.ieee.org/802.1/dcn/21/1-21-0042-01-ICne.pdf. These were discussed.
     Disposition: Further discussion at the following week's Nendica meeting is anticipated.

   (B) Potential new Study Item topics: The contribution "Potential Nendica Study Item: Evolving IEEE 802 Architecture Requirements" https://mentor.ieee.org/802.1/dcn/21/1-21-0014-02-ICne.pdf was not discussed due to lack of time.

9. Future Meetings. It was agreed (informally, none dissenting) to request a motion at the 802.1 closing plenary meeting as follows "802.1 authorizes Nendica to hold weekly electronic meetings each Thursday 09:00-11:00 ET. Access and agenda information are provided on the calendar at **Error! Hyperlink reference not valid.**".
   It was agreed (informally, none dissenting) to request another motion at the 802.1 closing plenary meeting to authorize additional Nendica meetings as announced at least 10 days in advance.
   Disposition: The Nendica Chair is to prepare motions accordingly. Nendica plans to next meet Jul 22, 2021 09:00-11:00 ET, although the meeting will be cancelled if not authorized by the 802.1 WG on Jul 20, 2021.

10. Any Other Business. At the request of the 802.1 WG, Nendica reviewed a liaison statement received from ITU-T SG13 ("LS 205: Information about draft Recommendation Y.ICN-SEAN on "Architecture and Functional Framework for On-Site, Elastic and Autonomous ICN") https://www.ieee802.org/1/files/public/docs2021/liaison-SG13-LS205-ICNnetwork-0421.pdf in order to recommend a response. It was noted that the statement had been forwarded to 802.1 from 802.3, which was the only recipient. Following discussion, it was agreed (informally, none dissenting) to draft a statement indicating that ICN is a wholly different approach than used in IEEE 802 layer 2 networking and is outside the scope of existing work in IEEE 802 and that relevance of the work to IEEE 802 is not apparent but may become so in the future; also requesting to be informed of future results

and suggesting that the IRTF should be kept informed. It was agreed (informally, none dissenting) that Paul Bottorff, Norman Finn, Glenn Parsons, and Roger Marks, would prepare a draft to be passed to the 802.1 Chair and Liaison Secretary for processing in the 802.1 WG.

Disposition: The Nendica Chair will prepare a draft for review by Paul Bottorff, Norman Finn, and Glenn Parsons.

No other business was discussed by Nendica in this meeting.

11:04 ET adjournment

8 YANGsters

Between this session and the preceding session, YANGsters held electronic meetings whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the YANGsters meeting held 2021-05-11 10:00 – 11:04 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=201202
- Minutes of the YANGsters meeting held 2021-05-18 10:00 – 11:05 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=202147
- Minutes of the YANGsters meeting held 2021-06-01 10:00 – 11:05 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=223640
- Minutes of the YANGsters meeting held 2021-06-08 10:00 – 11:02 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=231780
- Minutes of the YANGsters meeting held 2021-06-15 10:02 – 11:02 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=253315
- Minutes of the YANGsters meeting held 2021-07-06 10:00 – 11:09 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=ind21&L=STDS-802-1-MINUTES&P=268705

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

Call to order Jul 15, 2021 at 14:00 ET by Scott Mansfield, YANGsters Chair, who presided. Stephan Kehrer, YANGsters Secretary, wrote the minutes.

Agenda items and dispositions:
1. Meeting introduction. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "MEETING INTRODUCTION" http://www.ieee802.org/1/files/public/templates/admin-prePAR-intro-0721-v01.pdf.
   The YANGsters Chair announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   The YANGsters Chair asked participants to record their attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker.
2. Approval of agenda. The YANGsters Chair presented the agenda in https://1.ieee802.org/july-2021-plenary-session-electronic-yangsters-agenda/.
   Disposition: The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.
3. Introduction to YANGsters. The YANGsters Chair introduced YANGsters by presenting
   - https://1.ieee802.org/yangsters/, and
   - https://1.ieee802.org/yangsters/yangsters-guidelines/yangsters-faq/.

- It was pointed out that there is an upcoming editors' meeting on Thursday, Jul 22, 2021 at 11:00 ET. The IEEE 802.1Q amendment workflow, as well as the YANG workflow, are on the agenda of that meeting.

    Disposition: For information.

4. Liaisons: The YANGsters Chair presented and led the discussion on the following liaisons.
    - BBF on Faults/Defects
        o "Information on the strategy chosen by the BBF to bind the IEEE 802.1Qcx CFM YANG model to the IETF RFC 8632 Alarm Management YANG model to support BBF access node requirements" https://www.ieee802.org/1/files/public/docs2021/liaison-BBF-strategytobindQcxtoIETFalarmmgmtmodel-0721.pdf
        o It was pointed out that the liaison is not, strictly speaking, on YANG.
        o A draft liaison response was discussed and updated by YANGsters.
        o More offline wordsmithing on the draft liaison response is required.
    - ETSI mWT on YANG Gaps
        o "Publication of Wireless Backhaul Network and Services Automation: SDN SBI YANG models" https://www.ieee802.org/1/files/public/docs2021/liaison-etsi-ISGmWT-SDNSBIYANG-0721.pdf, and
        o "ETSI GR mWT 025 V1.1.1 (2021-03) Wireless Backhaul Network and Services Automation: SDN SBI YANG models" https://www.etsi.org/deliver/etsi_gr/mWT/001_099/025/01.01.01_60/gr_mWT025v010101p.pdf
        o The gaps identified in the liaised content may not be filled by modifications to IEEE 802.1 YANG.
        o A draft liaison response was discussed and updated by YANGsters.
        o More offline wordsmithing on the draft liaison response is required.

    Disposition: Agreed (informally, none dissenting), that offline wordsmithing is required on the draft liaison responses before 802.1 closing plenary meeting approval.

5. Review of discussions since last plenary: UML-like diagram description and iconography. The YANGsters Chair presented "UML-like Diagrams description and guidelines" https://www.ieee802.org/1/files/public/docs2021/yangsters-smansfield-uml-like-diagram-text-0721-v02.pdf.
    - Currently some IEEE 802.1 standards contain UML-Like diagrams. However, information is missing on how some of the elements of the UML-Like diagrams are to be read.
    - Several IEEE 802.1 projects that are currently in either WG or SA ballot are affected by this.
    - YANGsters suggested text be added to the corresponding drafts, to provide a high-level description of how the UML-like diagrams are to be interpreted.
    - YANGsters suggested providing a description of the UML-like diagrams and the elements used therein on a new YANGsters web page. It is further suggested to then point to that description in an informative note in the respective drafts and future IEEE 802.1 standards.
    - It is recommended by YANGsters to include a change history on that web page.

    Disposition: Agreed (informally, none dissenting), that the new YANGsters web page be created at https://1.ieee802.org/uml-like-diagrams/.

6. Review of discussions since last plenary: Pretty Printer Updates. The YANGsters Chair noted access to the Pretty Printer tool can be requested by contacting the author, Johannes Specht.

    Disposition: For information.

7. Review of discussions since last plenary: Reference Formatting. The YANGsters Chair presented "Reference guidelines" https://www.ieee802.org/1/files/public/docs2021/yangsters-smansfield-reference-format-0621-v01.pdf.
   - The document contains information on guidelines describing how to format references in YANG modules in IEEE 802.1 standards.
   Disposition: For information.
8. Review of discussions since last plenary: Updates to YANG Catalog GitHub repository. The YANGsters Chair noted that:
   - The YANG Catalog GitHub repository can be found at https://github.com/YangModels/yang/, the IEEE YANG directory can be found at https://github.com/YangModels/yang/tree/master/standard/ieee.
   - The initial draft YANG module for IEEE P1588e can be found at https://github.com/YangModels/yang/tree/master/standard/ieee/draft/1588.
   Disposition: For information.
9. Review of YANG issues from recent ballots. The YANGsters chair introduced the topic and the following was discussed.
   - Model vs. Module
     - There is text in recent drafts of IEEE 802.1 projects that describes the relationship between models and modules.
       - YANG model definition from P802.1ABcu: "YANG model: One or more YANG modules used to configure and monitor the managed element or system."
       - YANG module definition from P802.1ABcu: "YANG module: The description of the data model used to configure and monitor the managed element or system. A YANG module defines a hierarchy of nodes that can be used for NETCONF-based (see IETF RFC 7803) and RESTCONF-based (see IETF RFC 8040) operations."
   - Schema (not Scheme — that was a typo)
     - The term "scheme" was introduced erroneously by a typo.
     - YANGsters consider "schema" to be the correct term to use in IEEE 802.1 documents.
   Disposition: Agreed (informally, none dissenting) to use terminology as described.
10. Issues List. The YANGsters Chair presented the "YANGsters Issue List" https://1.ieee802.org/yangsters/yangsters-issue-list/.
    - There is currently only one item on the list regarding YANG revision management.
    - The discussion on that issue with experts from IETF is ongoing.
    Disposition: For information
11. Future meetings. There will be a motion during the 802.1 closing plenary meeting to request the continuation of the weekly YANGsters electronic meetings. YANGsters' next electronic meeting is Jul 27, 2021.
12. Any Other Business. No other business was discussed by YANGsters in this session.

16:01 ET adjournment

9 Closing Plenary Meeting

Call to order Jul 20, 2021 at 9:00 ET by the Chair who presided. The Recording Secretary wrote the minutes.

The table in section 1 reflects the attendance and affiliation of all participants in all 802.1 WG and subgroup meetings held in this session.

The Chair presented "Closing Plenary July 2021" finalized as https://www.ieee802.org/1/files/public/minutes/2021-07-closing-plenary-slides.pdf.

During this presentation, the Chair:
- Introduced the agenda on slide 2 that was tacitly approved.
- Announced that this closing plenary meeting remains subject to the IEEE SA Copyright Policies (slides 3 to 5), IEEE Patent Policy (slides 6 to 10) and IEEE SA Participation policies (slides 11 to 13) made available beforehand (as announced in the opening plenary meeting – see section 3) and made the "Call for Potentially Essential Patents", i.e. 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.
  - There were no responses to the call.
- Reviewed meeting decorum, including the policies on public reporting, and on photography or recording (slide 14), and called for any members of the press (i.e., anyone reporting publicly on this meeting) to announce their presence.
  - There were no responses to the call.
- Asked participants to record attendance in IMAT and, if they are unable to do so, to promptly provide their affiliation to the minute taker (slide 15).
- Provided electronic meeting guidelines (slide 16).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 17).
- Introduced 802.1 officers and leadership (slide 18)
- Showed the set of editors for current project (slide 19)
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 20), requesting and retaining voting membership (slide 21), and responding to WG ballots and E-Polls as well as regarding the consequences of not responding to WG ballots and E-Polls (slide 22).
- Reviewed the list of 802.1 voters (slide 23), including information about individuals who gained (slide 24), may gain (slide 25), may lose (slide 26), or will lose (slide 27) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 28).
- Reviewed the schedule for future interim (slide 29) and plenary (slide 30) sessions. This schedule remained unchanged from the opening plenary meeting except for the following updated presentation being linked for the May 2022 interim session:
  - Jordon Woods presented the update in "IEEE 802.1 Interim Meeting Proposal Santa Fe, New Mexico May 2022" https://www.ieee802.org/1/files/public/docs2021/admin-woods-May2022-interim-proposal-0721-v01.pdf.
    Disposition: Final decision required in Nov 2021. Motion at this closing plenary meeting.

- Summarized future session decision dates (slide 31). This remained unchanged from the opening plenary meeting except for the following information based on the May 2022 update above:
  - o Interim session
    - May 23-27, 2022, Santa Fe, NM, USA
- Conducted the following straw polls (slides 32 and 33) and addressed comments on these straw polls.
  - o When do you expect the next in-person 802.1 Session will be?
    - A – November 2021   16
    - B – March 2022   20
    - C – May 2022   16
    - D– July 2022   5
    - E – Sept 2022   1
    - F – Nov 2022   0
    - G – 2023 or later   2
    - No Answer   23
    - (84 in the room)
  - o Will you attend the 2021 November IEEE 802 Plenary if held in-person at the Hyatt Regency Vancouver in Vancouver, Canada Nov 14-19, 2021
    - Yes   17
    - No   24
    - Abstain   23
    - No answer   21
    - (85 in the room)
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 34).
- Presented the timeline for 802.1Q revisions and amendments (slide 35) and options for EC approvals of 802.1Q-Rev to SA ballot and P802.1BA-Rev to RevCom (slide 36).
- Reminded of an upcoming motion regarding IEEE Std 802.1D-2004 having been superseded by IEEE Std 802.1Q-2014 (slide 37).
- Pointed out 802.1 PAR extensions, related CSDs, Nendica ICAID renewal (slide 38) and other 802 PARs, PAR extension, PAR modification, related CSDs and draft 802.1 comments (slide 39) that are up for vote or finalization during this IEEE 802 plenary session.
- Summarized liaison resources (slide 40) and the set of new (slide 41) and previously-received (slide 42) incoming liaisons.
- Requested that Karen Randall, Liaison Secretary, lead the final review, which she did, of draft liaison responses prepared and reviewed in 802.1 subgroups during this plenary session (slide 43).
- Discussed promotion of the work of the WG (slide 44).
  - o Jessy Rouyer, Vice-Chair, presented the draft IEEE SA Beyond Standards blog post (reviewed in a TSN TG ad hoc) on 802.1CM and 802.1's 2020 IEEE SA Emerging Technology Award.
    Disposition: Motion at this closing plenary meeting.
- Requested that the subgroup Chairs provide reports on the activities of their subgroups (slide 45) during this plenary session (slide 46) (see individual subgroup minutes above for details) after showing the list of upcoming 802.1 leadership meetings (slide 47).
  - o Paul Congdon, Maintenance TG Chair, presented the report on slides 48-50.
  - o Mick Seaman, Security TG Chair, presented the report on slide 51.
  - o János Farkas, TSN TG Chair, Ludwig Winkel, IEC/IEEE 60802 Joint Project Chair, Craig Gunther, TSN TG Vice-Chair, presented the report on slide 52.
  - o Roger Marks, Nendica Chair, presented the report on slide 52.

- ▪ Paul Congdon presented "(Draft) IEEE 802 Nendica Report: Intelligent Lossless Data Center Networks" http://mentor.ieee.org/802.1/dcn/21/1-21-0004-01-ICne.pdf. **Disposition:** For information.
  - ○ Scott Mansfield, YANGsters Chair, presented the YANGsters report on slide 53.
- Provided guidance on how to use DirectVoteLive to vote on motions (slide 54).
- Showed the 802.1 consent agenda items for the LMSC closing plenary meeting (slides 55-57).
- Conducted votes on the following motions (slides 58-102) that all passed unless otherwise indicated. (Supporting information is available in "Closing Plenary July 2021" finalized as https://www.ieee802.org/1/files/public/minutes/2021-07-closing-plenary-slides.pdf.)

**Motions for 802 EC
Consent Agenda
Industry Connections**

- ○ Motion
  - ▪ Forward Nendica ICAID Renewal https://mentor.ieee.org/802.1/dcn/21/1-21-0011-07-ICne.docx, including Nendica ICCom Report https://mentor.ieee.org/802.1/dcn/21/1-21-0012-04-ICne.pptx for information
  - ▪ In the WG, Proposed: Roger Marks   Second: Jessy Rouyer
  - ▪ (y/n/a):   54, 0, 3

**Motions for 802 EC
Consent Agenda
PARs to NesCom**

- ○ Motions
  - ▪ Approve forwarding P802.1Qcj PAR extension documentation in https://www.ieee802.org/1/files/public/docs2021/cj-PAR-extension-0721-v01.pdf to NesCom
  - ▪ Approve (unmodified) CSD documentation in https://www.ieee802.org/1/files/public/docs2015/new-autoattach-romascanu-csd-0315-v01.pptx
  - ▪ In the WG, Proposed: János Farkas, Second: Jordon Woods
    - ○ PAR (y/n/a): 52, 1, 4
    - ○ CSD (y/n/a): 51, 1, 5
- ○ Motions
  - ▪ Approve forwarding P802.1Qcw PAR extension documentation in https://www.ieee802.org/1/files/public/docs2021/cw-PAR-extension-0721-v01.pdf to NesCom
  - ▪ Approve (unmodified) CSD documentation in https://www.ieee802.org/1/files/public/docs2017/cw-draft-CSD-0517-v02.pdf
  - ▪ In the WG, Proposed: János Farkas, Second: Jessy Rouyer
    - ○ PAR (y/n/a): 52, 1, 2
    - ○ CSD (y/n/a): 52, 1, 3

Motions for 802 EC
Consent Agenda
Drafts to SA Ballot

- o Motions
  - Approve sending P802.1ABdh D2.0 to Standards Association ballot
  - Confirm the CSD for P802.1ABdh in https://mentor.ieee.org/802-ec/dcn/19/ec-19-0138-00-ACSD-p802-1abdh.pdf
  - In the WG, Proposed: János Farkas   Second: Jessy Rouyer
    - o Sending draft (y/n/a): 54, 1, 3
    - o CSD (y/n/a): 54, 1, 3
- o Motions
  - Approve sending P802.1CBcv D2.0 to Standards Association ballot
  - Confirm the CSD for P802.1CBcv in https://mentor.ieee.org/802-ec/dcn/18/ec-18-0089-00-ACSD-802-1cbcv.pdf
  - In the WG, Proposed: János Farkas   Second: Jessy Rouyer
    - o Sending draft (y/n/a): 53, 2, 4
    - o CSD (y/n/a): 53, 1, 5
- o Motions
  - Approve sending P802.1CBdb D2.0 to Standards Association ballot
  - Confirm the CSD for P802.1CBdb in https://mentor.ieee.org/802-ec/dcn/18/ec-18-0090-00-ACSD-802-1cbdb.pdf
  - In the WG, Proposed: János Farkas   Second: Jessy Rouyer
    - o Sending draft (y/n/a): 50, 2, 6
    - o CSD (y/n/a): 50, 2, 6
- o Motion
  - Approve sending P802.1AS-2020/Cor1 D3.0 to Standards Association ballot
  - [Maintenance PAR, no CSD]
  - In the WG, Proposed: Paul Congdon Second: János Farkas
    - o Sending draft (y/n/a): 50, 2, 5
- o Motions
  - Conditionally approve sending P802.1ACct D2.0 to Standards Association ballot
  - Confirm the CSD for P802.1ACct in https://mentor.ieee.org/802-ec/dcn/17/ec-17-0155-00-ACSD-802-1acct.pdf
  - In the WG, Proposed: Paul Congdon Second: János Farkas
    - o Sending draft (y/n/a): 48, 1, 9
    - o CSD (y/n/a): 45, 1, 11
- o Motion
  - Conditionally approve sending P802.1BA-Rev D2.0 to Standards Association ballot
  - [Maintenance PAR, no CSD]
  - In the WG, Proposed: Paul Congdon Second: János Farkas
    - o Sending draft (y/n/a): 54, 3, 3

Motions for 802 EC
Consent Agenda
Liaisons and external communications (ME)

- o Motion
  - Approve submission of the following draft(s) to ISO/IEC JTC1/SC6 for information under the PSDO agreement, once the SA Ballot starts
    - o IEEE 802.1CBdb
    - o IEEE P802.1CBcv
    - o IEEE 802.1ABdh

- o IEEE P802.1AS-2020/Cor 1
- o IEEE P802.1BA-Rev
- o IEEE P802.1ACct
  - ▪ In the WG, Proposed: Paul Congdon Second: János Farkas
    - o Sending drafts (y/n/a): 57, 1, 0
- o Motion
  - ▪ Approve https://www.ieee802.org/1/files/public/docs2021/liaison-response-itu-t-sg11-8021Dwithdrawal-0721-v01.pdf as communication to ITU-T SG11 on the withdrawal of IEEE Std 802.1D-2004
    - o This approval is under LMSC OM "Procedure for public statements to government bodies"
    - o In the WG, Proposed: Paul Congdon   Second: János Farkas
    - o (y/n/a): 53, 1, 3
    - o
- o Motion
  - ▪ Approve https://www.ieee802.org/1/files/public/docs2021/liaison-response-SG13-LS205-0721-v01.pdf as communication to ITU-T SG13 on Liaison response to SG13-LS205, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
    - o This approval is under LMSC OM "Procedure for public statements to government bodies"
  - ▪ In the WG, Proposed: Roger Marks   Second: Jessy Rouyer
    - o (y/n/a): 48, 1, 7

**Motions for 802 EC
Consent Agenda
Liaisons and external communications (II)**

- o Motion
  - ▪ Approve https://www.ieee802.org/1/files/public/docs2021/liaison-response-BBF-strategytobindQcxtoIETFalarmmgmtmodel-0721-v01.pdf as communication to the Broadband Forum, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - ▪ Proposed: Scott Mansfield
  - ▪ Second: Jessy Rouyer
    - o In the WG (y/n/a): 53, 1, 4
- o Motion
  - ▪ Approve https://www.ieee802.org/1/files/public/docs2021/liaison-response-etsi-ISGmWT-SDNSBIYANG-0721-v01.pdf as communication to ETSI ISG mWT, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - ▪ Proposed: Scott Mansfield
  - ▪ Second: Jessy Rouyer
    - o In the WG (y/n/a): 49, 2, 6
- o Motion
  - ▪ Approve https://www.ieee802.org/1/files/public/docs2021/liaison-P802-1CQ-draft-sharing-with-IEEE-1722-0721-v01.pdf as communication to IEEE 1722 and IEEE 1722.1, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
  - ▪ Proposed: Roger Marks
  - ▪ Second: János Farkas
    - o In the WG (y/n/a): 51, 2, 3

- o Motion
  - ▪ Approve the blog post on IEEE Std 802.1CM in http://www.ieee802.org/1/files/public/docs2021/cm-draft-blog-post-0721-v01.pdf, to be released with editorial changes as deemed necessary.
  - ▪ Proposed: Jessy Rouyer
  - ▪ Second: János Farkas
    - o In the WG (y/n/a): 51, 1, 5

**Motions for 802 EC
Consent Agenda
Other (ME)**

- o Motion
  - ▪ Recognizing that
    - o IEEE Std 802.1D-2004 was reaffirmed in 2011
    - o The revision PAR that resulted in 802.1Q-2014 indicated that the project was merging IEEE Std 802.1D with IEEE Std 802.1Q in order to create a single bridging standard
    - o 802 WGs have been advised to update references from IEEE Std 802.1D to IEEE Std 802.1Q
    - o Partner SDOs were sent liaisons in Nov 2020 advising them to update references from IEEE Std 802.1D to IEEE Std 802.1Q
    - o Ongoing maintenance of IEEE Std 802.1Q (including MAC bridge functionality) is continuing with its 2020 revision PAR.
  - ▪ Request that IEEE SA staff modify its database and product listing to indicate that IEEE Std 802.1D-2004 was superseded by IEEE Std 802.1Q-2014.
  - ▪ In the WG, Proposed: Paul Congdon Second: János Farkas
    - o (y/n/a): 54, 2, 3

**Administrative
WG Motions**

- o Motion
  - ▪ 802.1 approves the March 2021 (plenary) and May 2021 (interim) session minutes:
    - o https://www.ieee802.org/1/files/public/minutes/2021-03-minutes-v2.pdf
    - o https://www.ieee802.org/1/files/public/minutes/2021-05-minutes-v2.pdf
  - ▪ Proposed: Jessy Rouyer
  - ▪ Seconded: János Farkas
  - ▪ Approved by Acclamation
- o Motion
  - ▪ 802.1 approves to hold an 802.1 electronic interim session January 17-21, 2022
  - ▪ Proposed: Jessy Rouyer
  - ▪ Second: Johannes Specht
  - ▪ In the WG (y/n/a): 58, 1, 0
- o Motion
  - ▪ 802.1 approves to hold an 802.1 interim session May 23-27, 2022 in Santa Fe, New Mexico, USA hosted by Analog Devices, Inc.
  - ▪ Proposal in:
    - o https://www.ieee802.org/1/files/public/docs2021/admin-woods-May2022-interim-proposal-0721-v01.pdf
  - ▪ Proposed: Jordon Woods
  - ▪ Second: Stephan Kehrer
  - ▪ In the WG (y/n/a): 49, 3, 7

- o Motion
  - ▪ Motion – Deferred from March:
    - o 802.1 authorizes the May 2021 Interim to generate PAR and CSD for pre-circulation to the EC for an amendment to IEEE Std 802.1Q to specify pulsed queues.
    - o Proposed: Norman Finn
    - o Second: Mike Potts
  - ▪ Motion to table
    - o Proposed: Norman Finn
    - o Second: Mick Seaman
    - o In the WG (y/n/a): 45, 2, 10

Maintenance TG
WG Motions

- o Motion
  - ▪ 802.1 authorizes Silvana Rodrigues, the Editor of P802.1ASdr, IEEE Standard for Local and Metropolitan Area Networks--Timing and Synchronization for Time-Sensitive Applications Amendment: Alternative Terminology, to prepare drafts for and conduct Task Group balloting.
  - ▪ Proposed: Paul Congdon
  - ▪ Second: János Farkas
  - ▪ In the WG (y/n/a): 51, 1, 3
- o Motion
  - ▪ 802.1 authorizes the Maintenance TG to hold electronic meetings to address task group matters and progress resolution of maintenance items documented in the maintenance database (https://1.ieee802.org/maintenance/database/).
    - o Dates/times to be announced subject to notice of at least 10 days to the 802.1 Minutes email list.
  - ▪ Proposed: Paul Congdon
  - ▪ Second: Jessy Rouyer
  - ▪ Approved by Acclamation

Security TG
WG Motions

- o Motion
  - ▪ Authorize the Security Task Group to hold electronic meetings to progress P802.1AEdk and task group matters arising:
    - o Dates/times to be announced subject to notice of at least 10 days to the 802.1 email exploder
  - ▪ Proposed: Mick Seaman
  - ▪ Second: Karen Randall
  - ▪ Approved by Acclamation

TSN TG
WG Motions

- Motion
  - 802.1 authorizes Marc Holness, the Editor of P802f – YANG Data Model for EtherTypes, to prepare drafts for and conduct Working Group balloting.
  - Proposed: János Farkas
  - Second: Jessy Rouyer
  - In the WG (y/n/a): 56, 0, 1
- Motion
  - 802.1 authorizes Hiroki Nakano, the Editor of P802.1Qdq Standard for Local and Metropolitan Area Networks: Bridges and Bridged Networks — Amendment: Shaper Parameter Settings for Bursty Traffic Requiring Bounded Latency to prepare drafts for and conduct Task Group balloting.
  - Proposed: János Farkas
  - Second: Nader Zein
  - In the WG (y/n/a): 48, 2, 5
- Motion
  - 802.1 authorizes the September 2021 interim session to generate PAR and CSD for pre-circulation to the EC for an amendment to IEEE Std 802.1AS to add support for 10BASE-T1S.
  - Proposed: Don Pannell
  - Second: Max Turner
  - In the WG (y/n/a): 42, 4, 7
- Motion
  - Motion
    - 802.1 authorizes the September 2021 interim session to generate PAR and CSD for pre-circulation to the EC for an amendment to IEEE Std 802.1Q to specify a mechanism for PFC headroom measurement and calculation.
    - Proposed: Lily Lv
    - Second: Paul Congdon
  - Motion to table:
    - Proposed: Lily Lv
    - Second Ludwig Winkel
    - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold electronic meetings weekly on Mondays 11:00-13:00 ET starting July 26, 2021.
  - Agenda will be announced on the 802.1 Minutes email list at least 5 calendar days before the electronic meeting.
  - Access information is posted on the http://www.ieee802.org/1/tsn page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Jessy Rouyer
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold additional electronic meetings as needed to progress the projects of the Task Group.
  - Dates, times, and agenda to be announced subject to notice of at least 10 calendar days at the 802.1 Minutes email reflector.
  - Access information is posted on the http://www.ieee802.org/1/tsn page and will be updated as necessary.
  - Proposed: János Farkas

- Second: Jessy Rouyer
- Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold weekly electronic meetings together with IEC 65C/WG18 to progress the work of the IEC/IEEE 60802 Joint Project on Mondays 9:00-11:00 ET starting July 26, 2021.
  - Agenda will be announced on the 802.1 Minutes email list at least 5 calendar days before the electronic meeting.
  - Access information is posted on the http://www.ieee802.org/1/tsn page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Ludwig Winkel
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold ad hoc electronic meetings together with IEC 65C/WG18 to develop System specification to progress the work of the IEC/IEEE 60802 Joint Project on Fridays 9:00-11:00 ET starting July 23, 2021.
  - Agenda will be announced on the 802.1 Minutes email list at least 5 calendar days before the electronic meeting.
  - Access information is posted on the http://www.ieee802.org/1/tsn page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Ludwig Winkel
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold weekly electronic meetings to progress the P802.1DG project on Tuesdays 9:00-11:00 ET starting July 27, 2021.
  - Agenda will be announced on the 802.1 Minutes email list at least 5 calendar days before the electronic meeting.
  - Access information is posted on the http://www.ieee802.org/1/tsn page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Max Turner
  - Approved by Acclamation
- Motion
  - 802.1 authorizes the TSN Task Group to hold bi-weekly electronic meetings together with SAE AS6675 to progress the work of the P802.1DP / SAE AS6675 Joint Project on Wednesdays 10:00-12:00 ET starting August 4, 2021.
  - Agenda will be announced on the 802.1 Minutes email list at least 5 calendar days before the electronic meeting.
  - Access information is posted on the http://www.ieee802.org/1/tsn page and will be updated as necessary.
  - Proposed: János Farkas
  - Second: Max Turner
  - Approved by Acclamation

Nendica
WG Motions

- o Motion
  - ▪ 802.1 authorizes Nendica to hold weekly electronic meetings each Thursday 09:00-11:00 ET starting July 22, 2021.
    - o Agenda to be announced subject to notice of at least 5 calendar days at the 802.1 Minutes email reflector.
    - o Access and agenda information are provided on the calendar at https://1.ieee802.org/802-nendica/.
  - ▪ Proposed: Paul Congdon
  - ▪ Second: Roger Marks
  - ▪ Approved by Acclamation
- o Motion
  - ▪ 802.1 authorizes Nendica to hold additional meetings as announced at least 10 days in advance.
    - o Dates, times and agenda to be announced subject to notice of at least 10 days to the 802.1 Minutes email list
    - o Access and agenda information are provided on the calendar at https://1.ieee802.org/802-nendica/.
  - ▪ Proposed: Paul Congdon
  - ▪ Second: Roger Marks
  - ▪ Approved by Acclamation

YANGsters
WG Motions

- o Motion
  - ▪ 802.1 authorizes weekly electronic meetings for the YANGsters subgroup on Tuesdays 10:00-11:00 ET starting with July 27, 2021.
    - o Agenda will be announced on the 802.1 Minutes email reflector at least 5 calendar days before the electronic meeting.
    - o Access information is posted on the https://1.ieee802.org/yangsters/yangsters-call-information/ page and will be updated as necessary.
  - ▪ Proposed: Scott Mansfield
  - ▪ Second: Jessy Rouyer
  - ▪ Approved by Acclamation
- Called for Any Other Business (slide 119)
  - o The Chair thanked the participants for all their efforts in making this session and closing plenary meeting smooth, reminded editors of the 802.1 Editors meeting on Jul 22, 2021 and participants of the closing EC plenary meeting on Jul 23, 2021.
  - o No further business was discussed in this meeting.

12:28 ET adjournment

10 Next Session

Sep 20-24, 2021 electronic interim session.