IEEE 802.1 Working Group
March 7-15, 2022 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.

The attendance columns (left to right) correspond to the following meetings:

1. Opening Plenary, Mon Mar 7, 2022, 09:00 - 11:00 ET
2. TSN - IEC/IEEE 60802, Mon Mar 7, 2022, 11:30 - 13:30 ET
3. 802.1 orientation, Mon Mar 7, 2022, 13:30 - 14:30 ET
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Last name	First name	Affiliation
Akizuki	katsuyuki	NEC Communication Systems, Ltd.
Aldana	Carlos	Facebook
Alexandris	Konstantinos	Huawei Technologies Duesseldorf GmbH
Ananda	Narasimha	Rockwell Automation
Andersdotter	Amelia	Sky UK Group
Andre	Jean-Marie	ST micro
Arunarthi	Venkat	Broadcom Corporation
Assmann	Ralf	Marvell Semiconductor, Inc.
Bao	Huajie	Huawei Technologies Co., Ltd
Barras	David	3db Access AG
Beecher	Philip	Wi-SUN Alliance
Belliardi	Rudy	Schneider Electric
Bierschenk	Jens	Robert Bosch GmbH

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Bims	Harry	Bims Laboratories, Inc.																											•		
Bober	Lennert	Fraunhofer Heinrich-Hertz-Institute																											•		
Boiger	Christian	b-plus technologies GmbH	•	•	•	•	•		•	•	•		•	•		•		•	•		•	•		•	•		•		•	•	•
Bottorff	Paul	Hewlett-Packard Development Company, L.P.	•	•	•	•	•		•	•	•		•	•	•	•		•	•		•			•	•		•			•	•
Boyle	Vincent	NSA Center for Cybersecurity Standards	•					•					•																		•
Canchi	Radhakrishna	Kyocera International Inc	•	•			•	•		•			•	•		•		•	•		•	•		•			•	•	•	•	•
Chang	Jae-yong	Keysight Technologies	•																												
Chen	Feng	Siemens AG	•	•		•	•		•		•		•	•		•		•	•		•	•		•	•				•		•
Chen	Sean	*				•																									
Choi	Junyoung	Samsung Electronics Co., Ltd.																											•		
Choudhury	Abhijit	Broadcom Corporation		•	•	•		•			•			•																	•
Coelho	Rodrigo	Siemens AG	•	•	•	•		•		•		•	•		•			•			•			•	•						
Congdon	Paul	Huawei Technologies Co., Ltd	•		•	•	•	•			•	•	•			•	•		•	•	•			•	•		•		•	•	•
Cummings	Rodney	National Instruments Corporation	•	•	•	•	•		•		•		•	•			•		•		•			•			•			•	•
da Silva	Claudio	Meta Platforms, Inc																											•		
Di Taranto	Rocco	Ericsson AB				•																									
Dorr	Josef	Siemens AG	•	•	•	•		•	•		•		•			•	•	•		•		•		•	•			•	•	•	
Du	Rui	Huawei Technologies Co., Ltd																											•		
Du	Zhenguo	Huawei Technologies Co., Ltd																											•		
Du	Zongpeng	China Mobile*																										•			
Ekrem	Ersen	Apple, Inc.																											•		
Elbakoury	Hesham	Huawei Technologies Co., Ltd; IEEE member / Self Employed	•	•	•	•	•		•																						
Engelmann	Anna	Volkswagen AG*																													•
Enzinger	Thomas	B&R Industrial Automation GmbH	•	•	•	•	•		•			•	•		•		•										•		•		•
Escudero-Sahuquillo	Jesus	IEEE Standards Association (IEEE-SA)																		•											
Farkas	Janos	Ericsson AB	•	•	•	•	•		•	•	•		•	•	•	•		•	•		•	•	•	•	•		•	•	•	•	•
Fedyk	Donald	LabN Consulting, L.L.C.	•	•		•	•	•		•	•		•	•	•		•	•	•	•	•						•			•	•
Finn	Norman	Huawei Technologies Co., Ltd	•	•	•	•		•	•	•	•		•	•		•	•	•		•	•	•		•	•		•		•	•	•
Fischer	Kai	Siemens AG		•																											
Furch	Andreas	Siemens AG		•	•																										
Gan	Ming	Huawei Technologies Co., Ltd																											•		
Garner	Geoffrey	Huawei Technologies Co., Ltd	•	•	•	•	•		•	•		•	•		•		•	•		•	•			•	•		•	•	•	•	•
Gelish	Joseph	ANSI, SAE, NIST, DOE, ITS America	•	•	•	•	•		•		•	•	•		•	•		•	•		•	•		•	•		•	•	•	•	•
Godfrey	Tim	Electric Power Research Institute, Inc. (EPRI)																											•		
Gonzalez	Angela	Huawei Technologies Duesseldorf GmbH					•				•							•													
Gopal	Amrit	Ford Motor Company	•	•	•	•		•		•		•	•		•			•	•		•			•			•		•		•
Goto	Fumihide	Self*																•													
Granhaug	Kristian	novelda																											•		
Gravel	Mark	Hewlett Packard Enterprise	•	•	•	•	•		•	•	•		•	•				•			•	•		•	•		•		•	•	•
Grow	Robert	RMG Consulting																		•											
Gunther	Craig	LabN Consulting, L.L.C.	•	•	•	•	•		•	•		•	•		•		•	•		•	•			•	•		•		•	•	•
Guo	Ziyang	Huawei Technologies Co., Ltd																											•		
Gutierrez	Marina	RealTime-at-Work (RTaW)	•	•	•	•	•		•	•	•		•				•			•	•						•		•	•	•
Haasz	Jodi	IEEE Standards Association (IEEE-SA)			•				•									•			•			•	•				•	•	•
Han	Ruibo	China Mobile Communications Corporation (CMCC)	•	•	•	•	•		•	•	•	•	•	•	•	•		•	•		•	•	•	•	•		•	•	•	•	•
Han	Zx*	China Unicom*																										•			
Handziski	Vlado	R3 Solutions;R3 Solutions GmbH																										•			
Hantel	Mark	Rockwell Automation	•	•	•	•	•		•	•		•	•		•		•	•		•	•			•	•		•		•	•	•
Hernandez	Marco	National Institute of Information and Communications Technology (NICT)		•												•												•	•		

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Hett	Christopher	Landis Gyr Group Worldwide																											•		
Hirata	Masayuki	Osaka University Graduate School of Medicine, Dept of Neurological Diagnosis and Restoration																											•		
Hopf	Daniel	Continental Automotive GmbH	•	•	•	•	•		•	•	•		•	•		•		•	•			•	•	•					•	•	•
hu	mark zhuomin	Aptiv	•	•	•	•	•		•		•		•	•		•	•		•			•	•						•	•	•
Huh	Woojung	Microchip Technology, Inc.	•	•	•	•	•		•				•	•		•	•		•			•	•	•	•				•	•	•
Hummen	Rene	Hirschmann Automation and Control, Inc.																	•												
Ikegami	Tetsushi	Meiji University																											•		
Islinger	Tobias	Infineon Technologies	•			•							•			•			•												•
Itaya	Satoko	National Institute of Information and Communications Technology (NICT)	•	•	•	•	•		•	•	•		•	•		•	•		•			•	•	•					•	•	•
Ito	Yoshihiro	Nagoya Institute of Technology	•	•	•	•	•		•	•	•		•	•		•	•		•			•	•	•					•	•	•
Jabbar	Abdul	General Electric Company (GE)	•			•	•			•	•	•		•	•	•		•						•					•	•	•
Janker	Georg	BMW Group;Ruetz System Solutions GmbH*				•																									•
Jia	Xueqin	China Unicom																							•						
Jiang	Jinjing	Apple Inc.																											•		
Jing	Wang	China Mobile*																						•							
Jones	Peter	Cisco Systems, Inc.																				•								•	•
Kabbinale	Aniruddh	SAMSUNG																											•		
Kaltheuner	Henning	d&b audiotechnik GmbH & Co. KG			•	•																									
Karl	Michael	Marvell Semiconductor, Inc.	•	•		•	•		•	•	•		•	•	•		•	•		•		•	•	•					•	•	•
Kasamatsu	Akifumi	National Institute of Information and Communications Technology (NICT)																											•		
Kashiwagi	Yoshio	Nissin Systems																											•		
Kehrer	Stephan	Hirschmann Automation and Control, Inc.	•	•	•	•	•		•	•		•	•	•	•		•		•	•	•		•	•		•		•	•	•	•
Kiessling	Marcel	Beckhoff Automation	•	•	•	•	•		•	•	•	•	•	•	•		•	•		•	•	•	•	•	•		•	•	•	•	•
Kim	Minsoo	YRP International Alliance Institute																											•		
Kinney	Patrick	Kinney Consulting LLC																											•		
Kitazawa	Shoichi	Muroran IT																											•		
Kivinen	Tero	Self Employed																											•		
Klamser	Oliver	Pilz GmbH & Co. KG	•	•	•	•	•		•	•		•	•	•		•	•		•			•	•	•					•	•	•
Kobayashi	Takumi	Yokohama National University																											•		
Kohno	Ryuji	YNU/CWC UofOulu; YNU/YRP-IAI																											•		
Kondo	Kenji	Yaskawa Electric Corp	•	•	•		•		•			•		•			•						•	•	•				•		•
Kondou	Keitarou	HRCP R&D Partnership																											•		
Krieger	Ann	US Department of Defense	•	•	•	•			•		•		•		•			•	•		•		•	•					•	•	•
Kronauer	Genio	L-Acoustics			•	•																									
Kuerner	Thomas	TU Braunschweig																											•		
Lai	Gavin	Moxa Networking Co., Ltd.	•	•	•	•	•		•			•	•		•		•		•			•	•						•	•	•
Lalitte	Vanessa	IEEE SA (Staff)							•																						
Law	David	Hewlett Packard Enterprise*																				•									
Levy	Joseph	InterDigital, Inc.															•														
Li	Hee	Beijing University of Posts and Telecommunications*																											•		
Li	Yizhou	Huawei Technologies Co., Ltd	•	•		•			•			•					•							•					•		•
Liu	Chenchen	Huawei Technologies Co., Ltd																												•	
Liu	Pengyjy	China Mobile*																						•							
Liu	Po	NIO*				•																									
Liu	Yong	Apple, Inc.																											•		
liumh*	*	*																												•	
Lopes	Joao	Qualcomm Incorporated	•	•	•	•	•		•	•		•	•	•		•	•		•			•	•					•	•	•	•
Lv	Jingfei	Huawei Technologies Co., Ltd				•			•			•					•					•			•				•		•
Lv	Lily	Huawei Technologies Co., Ltd	•	•	•	•	•		•		•	•	•	•		•	•		•			•	•	•					•	•	•

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Mangin	Christophe	Mitsubishi Electric Corporation
Mansfield	Scott	Telefon AB LM Ericsson
Marks	Roger	EthAirNet Associates; Huawei
Mater	Olaf	Marvell Semiconductor, Inc.
McCall	David	Intel Corporation
McIntosh	James	Microchip Technology, Inc.
McMillan	Larry	Western Digital Corporation
Meisinger	Andreas	Siemens AG
Mittelberger	Martin	Siemens AG
Nabki	Frederic	SPARK Microsystems
Naik	Srinath	Aptiv*
Nakano	Hiroki	CAHI Corporation; Kyoto University; National Institute of Information and Communications Technology (NICT)
Niewczas	Jaroslaw	Qorvo
Nikolich	Paul	SAMSUNG
Nomura	Takumi	Honda R&D
Noseworthy	Bob	University of New Hampshire InterOperability Laboratory (UNH-IOL) + DCS Corp.
Obradovic	Dragan	Siemens AG
Orlando	Christian	IEEE Standards Association (IEEE-SA)
Osswald	Lukas	Eberhard Karls University of Tuebingen
Ostertag	Martin	Zurich University of Applied Sciences
Pakrooh	Pooria	Qualcomm Technologies, Inc.
Palmer	Clark	Meteorcomm LLC
Pannell	Donald	NXP Semiconductors
Parsons	Glenn	Ericsson AB
Pfaff	Oliver	Siemens AG
Piccola	Scott	ViaSat, Inc.
Potts	Michael	Molex Incorporated
Powell	Clinton	Powell Wireless Consulting, LLC
Proell	Dieter	Siemens AG
Rahmani	Mohammad	SPARK Microsystems
Randall	Karen	Randall Consulting
Rantala	Enrico-Henrik	Zeku
Rasal	Abuzafor	Aptiv
Redlich	Oded	Huawei Technologies Co., Ltd
Regev	Alon	Keysight Technologies
Riegel	Maximilian	Nokia
Robert	Joerg	TU Ilmenau/Fraunhofer IIS
Rodrigues	Silvana	Huawei Technologies Co., Ltd
Rolfe	Benjamin	Blind Creek Associates
Rouyer	Jessy	Nokia
Ruoyu	Ji	*
Saito	Hiroki	ARIS Inc.
Santulli	Jennifer	IEEE Standards Association (IEEE-SA)
Sato	Atsushi	Yokogawa Electric Corporation
Schewe	Frank	Phoenix Contact
Schlechter	Greg	Intel*
Seaman	Michael	Individual
Seewald	Maik	Cisco Systems, Inc.
Serang	Daoud	CML Microcircuits

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16. TSN - IEC/IEEE 60802, Thu Mar 10, 2022, 11:30 - 13:30 ET
17. TSN - P802.1DG, Thu Mar 10, 2022, 14:00 - 16:00 ET
18. YANGsters, Thu Mar 10, 2022, 14:00 - 16:00 ET
19. TSN, Fri Mar 11, 2022, 09:00 - 11:00 ET
20. TSN - IEC/IEEE 60802, Fri Mar 11, 2022, 09:00 - 11:00 ET
21. Security, Fri Mar 11, 2022, 11:00 - 13:00 ET
22. TSN, Fri Mar 11, 2022, 11:30 - 13:30 ET
23. Maintenance, Fri Mar 11, 2022, 14:00 - 16:00 ET
24. TSN, Mon Mar 14, 2022, 08:00 - 10:00 ET
25. TSN - IEC/IEEE 60802, Mon Mar 14, 2022, 08:00 - 10:00 ET
26. 802.1/802.15 Joint, Mon Mar 14, 2022, 10:00 - 11:00 ET
27. TSN, Mon Mar 14, 2022, 11:00 - 13:00 ET
28. TSN, Mon Mar 14, 2022, 13:30 - 15:30 ET
29. Closing Plenary, Tue Mar 15, 2022, 08:00 - 11:00 ET

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
Sever	Fatih	ASELSAN	●						●		●							●	●												
Shah	Kunal	Apple Inc																													
Sivakolundu	Ramesh	Cisco Systems, Inc.	●	●	●	●	●		●	●	●		●	●	●		●	●		●			●	●	●		●	●	●	●	●
Smith	Malcolm	Cisco Systems, Inc.			●	●																									
Specht	Johannes	Self; Analog Devices, Inc.; Mitsubishi Electric Corporation; Phoenix Contact GmbH & Co. KG; PROFIBUS Nutzerorganisation e.V.; Siemens AG; Texas Instruments, Inc.	●	●	●	●	●		●	●		●	●	●	●		●	●		●	●	●	●	●	●		●	●	●	●	●
Staengler	Ferenc	Kone	●	●	●	●	●		●		●	●	●		●		●				●					●			●		●
Stamenic	Nemanja	Siemens AG	●	●	●	●	●		●			●	●	●	●		●	●	●		●		●			●		●	●	●	●
Stanica	Marius	ABB AB	●	●	●	●	●		●		●	●		●		●				●		●				●		●	●	●	●
Stanley	Dorothy	Hewlett Packard Enterprise																													●
Steindl	Guenter	Siemens AG	●	●	●	●	●		●	●		●	●	●		●		●		●		●			●				●	●	●
Stuebing	Gary	Cisco Systems, Inc.																												●	
Sturek	Don	Itron Inc.																												●	
Sun	Li	Huawei Technologies Co., Ltd																												●	
Takita	Daisuke	Mitsubishi Electric Corporation	●	●	●		●		●		●			●		●			●		●	●		●	●		●				●
Thompson	Geoffrey	GraCaSI S.A.*																								●	●				
Tse	Richard	Microchip Technology, Inc.*						●																							
Turner	Max	Ethernovia, BMW, Ruetz System Solutions	●	●	●	●	●		●	●	●	●	●	●		●		●	●		●	●	●	●	●		●	●	●	●	●
Varga	Balazs	Ericsson AB	●	●	●	●	●		●	●		●	●	●		●	●		●		●	●	●			●	●	●	●	●	●
Venkatesan	Ganesh	Intel Corporation	●	●	●	●	●		●	●	●		●	●		●	●						●				●		●	●	●
Verma	Lochan	Apple, Inc.																												●	
Verso	Billy	Qorvo																												●	
Waineo	Nels	Collins Aerospace						●																							
Wang	Hao	Self*	●																												
Wang	Tongtong	Huawei Technologies Co., Ltd	●	●	●	●		●			●	●	●		●		●				●			●			●		●	●	●
Wang	Xinyuan	Huawei Technologies Co., Ltd																							●		●				
Wang	Yi	Huawei Technologies Co., Ltd																									●				
Watsen	Kent	Watsen Networks*																	●												
Weilbuchner	Hannes	B&R Industrial Automation GmbH	●	●	●	●		●			●	●	●		●		●	●	●			●			●		●				
Wessels	Leon	Uman Technologies ZA	●	●	●	●	●		●		●		●	●		●	●		●	●		●		●		●	●	●	●		
Wilton	Robert	Cisco Systems, Inc.																		●											
Winkel	Ludwig	PNO e.V.	●	●	●	●	●		●	●		●	●	●	●		●	●		●		●		●	●		●	●	●	●	●
Wisland	Dag	Novelda AS; University of Oslo																								●					
Woods	Jordon	Analog Devices Inc.	●	●	●	●	●		●			●	●	●		●			●		●			●			●		●	●	●
Wu	Kuan	Huawei Technologies Co., Ltd																								●					
Xu	Dayin	Rockwell Automation																									●				
Yamaura	Takahiro	TOSHIBA Corporation	●	●	●	●	●		●		●	●	●	●		●		●		●		●	●	●			●	●	●	●	●
Yang	Xun	Huawei Technologies Co., Ltd																								●					
Ye	Zhenzhen	Red Point Positioning																								●					
Yin	Yue	Huawei Technologies Co., Ltd																●			●	●				●	●		●	●	●
Yong	Su	Apple, Inc.																								●					
Yoon	Kangjin	Meta																								●					
Yu	Yi	Rockwell Automation		●	●			●			●		●			●			●			●		●			●	●			●
Zeisberg	Sven	Hochschule fuer Technik und Wirtschaft Dresden;ZIGPOS GmbH																								●					
Zou	Qiyue	Meta																								●					

(*) Last name, first name and affiliation possibly incorrect as derived from Webex access information or otherwise, and not 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 & 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 Mar 7, 2022 at 9:00 ET by the Chair who presided. The Recording Secretary wrote the minutes.

The Chair presented "Opening Plenary March 2022" finalized as http://www.ieee802.org/1/files/public/minutes/2022-03-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);
    - o The Chair called for any members of the press (i.e., anyone reporting publicly on this meeting) to announce their presence.
        - Marina Gutiérrez answered the call due to a blogging activity.
- 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.
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 18).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 19).
- Introduced 802.1 officers and leadership (slide 20).
- Discussed 802.1 WG Process (slide 21) including the "New work" process as previously introduced and leveraging Nendica towards vetting all new 802.1 work.

- Provided an update on current joint development procedures (slide 22).
  - Abdul Jabbar provided a brief overview of the changes in the joint development agreement for the IEEE P802.1DP / SAE AS6675 project.
- Reminded 802.1 voting members of their obligations regarding declaring affiliation(s) and employer(s) (slide 23), electronic ballots (ePolls) conducted between sessions (slide 24), requesting and retaining voting membership (slide 25), and responding to WG ballot series (including ePolls) as well as regarding the consequences of not responding to WG ballot series (including ePolls) (slide 26).
- Reviewed the list of 802.1 voters (slide 27), including information about individuals who may gain (slides 28 and 29), will lose (slide 30), may lose (slide 31) 802.1 voting membership.
- Reminded individual participants of 802.11 reciprocal credit, which was continued at this session (slide 32).
- Had the Executive Secretary introduce information about the May 2022 interim session (slide 33), the July 2022 plenary session (slide 34), the September 2022 interim session (slide 35) and attendant offers from GE (slide 36) and 802 Wireless (slide 37).
- Conducted the following straw polls (slide 38):
  - What is your preference for the September 2022 interim session?
    - A – Electronic - 37
    - B – GE offer - 26
    - C – 802.11 offer - 15
    - D – no response – 9
  - What is your preference for the September 2022 interim session?
    - A – Electronic - 48
    - B – GE offer - 28
    - C – no response - 12
- Had the Executive Secretary introduce information about the May 2023 interim session (slide 39) and attendant offers from ABB (slide 40) and 802 Wireless (slide 41), and review the schedule for future interim sessions and past interim sessions changed to electronic due to COVID-19 (slide 42):
  - 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 17-21, 2022
    - Changed to electronic due to COVID-19
  - May 23-27, 2022
    - Santa Fe, NM, USA hosted by Analog Devices (changed to electronic due to COVID-19)
  - September 2022
    - Proposals in Niskayuna, NY, USA and Waikoloa, HI, USA
  - January 2023

- o May 2023
  - ▪ Proposals in Orlando, FL, USA and Helsinki, Finland
- Had the Executive Secretary review the schedule for future plenary sessions and past plenary sessions cancelled or changed to electronic due to COVID-19 (slide 43):
  - o March 15-20, 2020 – Atlanta, GA, USA
    - ▪ Hilton Atlanta (cancelled due to COVID-19)
  - o July 12-17, 2020 – Montreal, QC, Canada
    - ▪ Sheraton Montreal (changed to electronic due to COVID-19)
  - o November 8-13, 2020 – Bangkok, Thailand
    - ▪ Bangkok Marriott Marquis Queen's Park (changed to electronic due to COVID-19)
  - o March 14-19, 2021 – Denver, CO, USA
    - ▪ Hyatt Regency Denver (changed to electronic due to COVID-19)
  - o July 11-16, 2021 – Madrid, Spain
    - ▪ Marriott Madrid Auditorium (changed to electronic due to COVID-19)
  - o November 14-19, 2021 – Vancouver, BC, Canada
    - ▪ Hyatt Regency Vancouver (changed to electronic due to COVID-19)
  - o March 13-18, 2022 – Orlando, FL, USA
    - ▪ Hilton Orlando Lake Buena Vista (changed to electronic due to COVID-19)
  - o July 10-15, 2022 – Montreal, QC, Canada
    - ▪ Sheraton Le Centre Montreal
  - o November 13-18, 2022 – Bangkok, Thailand
    - ▪ Marriott Marquis Queen's Park
- Had the Executive Secretary review the list of dates by which the decision to hold a future session would have to be made (slide 44):
  - o Plenary sessions
    - ▪ July 10-15, 2022 – Montreal, QC, Canada
      - – Latest possible decision date: April 2022
  - o Interim sessions
    - – None
- Reviewed the LMSC schedule of EC/WG/TAG meetings to be held during this plenary session (slide 45).
- Reported the following items out of the 802 Executive Committee (EC) plenary session #129 (electronic plenary session #6) (slide 46):
  - o IEEE Technical Activities (TAB) special projects
    - ▪ Funding available for special projects to encourage new standards participation
  - o Hybrid meetings ad hocs
    - ▪ Mixed Mode Best Practices (GeorgeZ) – draft (EC-21-203)
    - ▪ Future Meeting Vision (AndrewM) - long term vision for effective 802 sessions
  - o 802 Task Force
    - ▪ No update on tools project (document management and attendance - replacement of Mentor/IMAT)
  - o 802 Rules update (EC-22-58)
    - ▪ Ballot responses clarified to count per series
    - ▪ Draft sharing within 802 is now prohibited without a cover page, alternatives sought
  - o Future Venues (EC-22-02)
    - ▪ Orlando – Mar 2022 – Venue cancelled and $250k penalty paid

- ▪ Montreal – July 2022 – registration opening soon – discount for hybrid meeting setup
            - ▪ Future venues (2026 and beyond) on hold
    - o Treasurer (EC-22-56)
        - ▪ 2021 surplus of $40k, reserves now $700k ($500k cash, $200k committed)
        - ▪ 2022 surplus projected at $200k to restore reserves to ~$1M
- Introduced IEEE SA staff supporting IEEE 802 (slide 47):
    - o Jodi Haasz – IEEE 802 lead
    - o Christian Orlando – IEEE 802.1 program manager
    - o Michelle Turner – Editor
    - o Catherine Berger – Editor
- Shared 802 analytics data regarding the proportion of active 802 standards to all IEEE SA standards and the page count proportions for 802 LMSC to all IEEE SA standards (slide 48).
- Provided IEEE 802 program status pointers (slide 49).
- Indicated that 802 LMSC elections would take place at this plenary session (slide 50).
    - o Individuals wishing to run for elected positions were invited to talk to currently elected individuals for further details.
    - o The 802.1 Chair and 802.1 Vice-Chair are standing for re-election.
- Provided information about the 802 Chair standing for re-election and his plan for filling 802 appointed Officer positions and non-voting positions of 802 (slide 51) as well as information about 802.1 WG elections (slide 52).
- Showed the straw polls planned to be conducted at the closing plenary meeting (slide 53):
    - o 1. When do you expect the next in-person 802.1 session will be?
        - ▪ July 2022   ▪ Sept 2022
        - ▪ Nov 2022   ▪ 2023 or later
    - o 2. If the 2022 July Plenary Session is held in Montreal, Canada as an in-person only session, will you attend?
        - ▪ Yes/No
    - o 3. If the 2022 July Plenary Session is held in Montreal, Canada as a mixed-mode session, will you attend:
        - ▪ Attend In-person
        - ▪ Attend Virtually (remotely)
        - ▪ Will not attend plenary
- Provided information about public review (slide 54).
- Pointed out the 802.1 PARs and CSDs (slide 55) and other 802 PARs, PAR modifications, related CSDs and CSD modification (slide 56) that are up for vote or finalization during this IEEE 802 plenary session.
- Discussed the 802 technical plenary meetings held so far and possible future such meetings to address specific technical problems across all 802 (slide 57).
- Had the Liaison Secretary, introduce liaison resources (slide 58).
- Reviewed, with the Liaison Secretary's support, the set of new and previously-received incoming liaisons to be handled by specific subgroups as listed (slide 59).
- Summarized IETF coordination items (slide 60).
    - o A liaison is open to send P802.1CQ to the IETF.
- Discussed promotion of the work of the WG (slide 61), 802.1 public visibility messaging (slide 62) and the new IEEE SA contributors collection (slide 63).

- Summarized the various types of IEEE Awards encouraging nominations (slide 64), recognized and congratulated 2021 IEEE SA Standards Medallion recipients Geoffrey Garner and Marc Holness (slide 65) as well as WG Chair Awards recipients (slide 66).
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 67).
- Presented the updated timeline for 802.1Q revisions and amendments (slide 68).
- Had the Nendica Chair present a Nendica status report (slides 69 to 80).
- Showed the 802.1 plenary session electronic meeting schedule for this session, which was tacitly approved (slide 81).
- Listed 802.1 leadership meetings (slide 82).
- Reminded the Working Group of the logistics orientation to be held Mar 7, 2022 13:30 ET (slide 83).
- Requested that subgroup agendas be presented (slide 84):
  - The Maintenance TG Chair presented the agenda on slide 85.
  - The Security TG Chair presented the agenda on slide 86.
  - The TSN TG Chair, IEC/IEEE 60802 Joint Project Chair, TSN TG Vice-Chair, and Abdul Jabbar as IEEE P802.1DP/SAE AS6675 joint project co-Chair presented the agenda on slide 87
  - The Nendica Chair presented the agenda on slide 88.
  - The YANGsters Chair presented the agenda on slide 89.
- Called for Any Other Business (slide 90).
  - No further business was discussed in this meeting.

11:16 ET adjournment

4 802 Technical Plenary

Between this session and the preceding session, an 802 Technical Plenary meeting was held whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEEE 802 Technical Plenary meeting held 2022-03-03 9:00 – 10:14 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;ebee9ef.22&S=

5 802.1/802.15 Joint Meeting

Between this session and the preceding session, an 802.1/802.15 joint meeting was held whose minutes are incorporated to these session minutes by reference as follows:
- IEEE 802.1 802.15 Joint Call (Feb. 16, 2022) Minutes https://mentor.ieee.org/802.15/dcn/22/15-22-0115-00-0000-feb-2022-ieee-802-1-802-15-joint-call-minutes.docx

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 Mar 14, 2022 at 11:07 ET by Clint Powell, IEEE 802.15 Vice-Chair, who presided with Glenn Parsons, IEEE 802.1 Chair. Jessy Rouyer, IEEE 802.1 Recording Secretary, wrote the minutes.

Agenda items and dispositions:
1. Intro and reminders. The IEEE SA slides on IEEE Patent Policy and IEEE SA Copyright and Participation Policies were provided beforehand as part of "Joint 802.1/802.15 Meeting Slides – March 2022" https://mentor.ieee.org/802.15/dcn/22/15-22-0171-01-0000-2022-march-joint-802-1-802-15-agenda-and-mtg-slides.pptx.

The 802.15 Vice-Chair showed slides 1-8 of this presentation implicitly 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 802.15 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 prior to the end of the meeting.

The 802.15 Vice-Chair asked participants to record their attendance in IMAT, and presented the agenda on slide 9 of that presentation.

Disposition: The agenda was reviewed, and agreed (informally, none dissenting) as reflected by these minutes.

2. Recap. The 802.15 Vice-Chair presented slides 10-18 and briefly introduced slide 19 of "Joint 802.1/802.15 Meeting Slides – March 2022" https://mentor.ieee.org/802.15/dcn/22/15-22-0171-01-0000-2022-march-joint-802-1-802-15-agenda-and-mtg-slides.pptx.
No discussion.
Disposition: For information.

3. Joint 802.1/802.15 Mtg. Prep. Ben Rolfe presented slide 19 of "802.1 Relevance to 802.15 MACs" of "Joint 802.1/802.15 Meeting Slides – March 2022" https://mentor.ieee.org/802.15/dcn/22/15-22-0171-01-0000-2022-march-joint-802-1-802-15-agenda-and-mtg-slides.pptx in detail.
Discussion:
- 802.15.3's mapping to the MAC service is addressed in 802.1ACct.
- Clarification that "Dynamic Addressing" is about the randomization of MAC addresses.
  - 802.11 has work under way to understand MAC address randomization, what happens in the presence of a duplicate MAC address, when and how often to change a MAC address.
  - From the perspective of the MAC service and bridging, two aspects relevant to 802.15 may create issues: duplicate MAC addresses, whether universal or locally-administered, and changing MAC addresses, which standards 802 and 802.1AC have not really addressed. A potential amendment to standard 802 could address the latter aspect.
  - Regulatory requirements may be imposed on extension networks regarding privacy.

- o P802.1CQ is about assigning global addresses dynamically and the structure of the address can be coordinated in the assignment: groups of elements in a subnetwork could have a common addressing scheme. Parallel with short addresses assigned by PAN coordinators.
- Clarification that "15.4 (V2)" refers to the extensible and flexible frame formats in 802.15.4e.
  - o The columns in the table of slide 19 are a potentially non-exhaustive set of features aimed at bringing the listed 802.15 standards closer to 802.1 standards in terms of conformance.

Disposition: For information.

4. What Now. Ben Rolfe presented slides 20-24 of "802.1 Relevance to 802.15 MACs" of "Joint 802.1/802.15 Meeting Slides – March 2022" https://mentor.ieee.org/802.15/dcn/22/15-22-0171-01-0000-2022-march-joint-802-1-802-15-agenda-and-mtg-slides.pptx.

Discussion:

- Regarding "TG3ma is updating to change reference to 802.1D to 802.1Q" on slide 21:
  - o A cross check from 802.1 would be helpful before SA ballot.
- Regarding "No specific support for 802.15.4 MAC in 802.1AC" on slide 22:
  - o An 802.1AC amendment project, similar to P802.1ACct for 802.15.3 support, could be needed to support 802.15.4 (and potentially 802.15.6) once revision of 802.15.4 starts.
  - o Consensus that 64-to-48 bit addressing is needed but not on whether this would be specified in P802.15.4-Rev or in an 802.1AC amendment.
  - o Bridging in an 802.15.4 context relates to P802.1CQ and P802.15.4-Rev might need to accommodate P802.1CQ.
  - o Adding support for 48-bit addresses in P802.15.4-Rev could be considered.
  - o Joint 802.1/802.15 meetings are a good venue to figure out the logistics of revising 802.15.4 and amending 802.1AC.
- Needed is a firmer 802.15 assessment of 802.15 needs on a per-802.15 project basis per the framework of the table on slide 19.
- Regarding 802.15.6a, Ryuji Kohno, 802.15.6a Chair, showed slides 5 and 10 of "MAC Bridging for Time-Sensitive Networking of 802.15.6" https://mentor.ieee.org/802.15/dcn/22/15-22-0024-01-006a-mac-bridging-for-time-sensitive-networking-of-802-15-6a.pptx.
  - o 802.15.6a is looking for bridging to allow communication regardless of the type of networks being bridged.
  - o 802.1 could provide guidance as needed.
    - Bridging and 802.11ak should apply in the use case of slide 5.
    - WGs want to support TSN features like VLAN-based stream reservation.
    - Different MACs have different levels of implementations of 802.1 features.
    - P802.11be wants to fully support TSN; the 802.1 TSN TG and 802.11 TGbe are coordinating on this. 802.1 could use similar coordination for 802.15.6a depending on the details, e.g., whether 802.11 TGbe would need to be involved.
  - o Security, in particular for medical application use cases, is of importance to 802.15.6a.

- ▪ 802.1 could provide guidance as needed based on 802.15.6a review of 802.1X port authentication, 802.1AR device identification or other 802.1 security aspects.
  - Is 802.15's assessment on slide 19 a good start or is more needed for 802.15's output to be more 802.1 compatible?
    - ○ Good start. 802.1 has MAC and VLAN bridging. TSN requires support of VLAN bridging.
  - In the table of slide 19, 802.15.14 and 802.15.15 are on the same row as they are similar yet parallel projects, referencing and based on 802.15.4, focusing on narrow band and ultra-wide band Wi-Fi networks, and seeking to align on 802.15.4 V2.
  - 802.15.3 and 802.15.6 are new projects.
  - 802.15.7 is completing.
  - 802.15.13 is focused on optical communications with TSN as a main goal, is striving for compliance with 802.1AC and 802.1 security but is in SA ballot. Improved compatibility with 802.1 aspects may require future 802.15.13 amendment work. 802.1 validation of the current 802.15.13 draft would be welcome.

    Disposition: Further discussion needed once 802.15 revisits the table of slide 19 based on discussion.
5. Next Steps. Agreed (informally, none-dissenting) to:
   - Prioritize review of 802.15.13 based on dedicated presentation to 802.1 in a joint 802.1/802.15 meeting the week of Apr 11, 2022 or earlier, preferably Monday, accounting for 802.15.13 participants being located outside North America. Time and date to be formally agreed offline.
     - ○ Time and date set post-meeting as follows: Mon, Apr 11, 2022 13:00 - 14:00 ET "802.15 TG13 (OWC) – Overview of Draft to 802.1" in "IEEE 802 and Subgroup Calendars" https://www.ieee802.org/802tele_calendar.html.
   - Tentatively meet jointly and electronically during the May 2022 wireless interim session. Time and date to be formally agreed offline.
6. AOB. No other business was discussed in this meeting.

12:26 ET adjournment

6 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 2022-02-01 11:01 – 12:26 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;1f72453e.22
- Minutes of the Maintenance TG meeting held 2022-02-15 11:02 – 11:58 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;b950b559.22
- Minutes of the Maintenance TG meeting held 2022-03-01 11:00 – 13:16 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;1390abf9.22

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 Mar 8, 2022 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/march-2022-plenary-session-electronic-maintenance-tg-agenda/.
   Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. Review Motions. The Maintenance TG chair presented, "Maintenance Motion Summary" in https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-0322-2-v01.pdf.
   Disposition: For information. It was noted that a motion to send the P802-Rev PAR to NesCom was missing.
4. 802 PARs Under Consideration. The Maintenance TG chair led the discussion of other Working Group PARs under consideration https://www.ieee802.org/PARs.shtml and led the drafting of the comments.
   Disposition: The comments were drafted as follows.
   - "Comments on P802.3 PARs & CSDs From 802.1" https://www.ieee802.org/1/files/public/docs2022/admin-PAR-CSD-comments-802-3-0322-v02.pdf

- "Comments on P802.15 PARs & CSDs From 802.1"
  https://www.ieee802.org/1/files/public/docs2022/admin-PAR-CSD-comments-802-15-0322-v02.pdf
4. P802.1ASdr Editor's Update. Silvana Rodrigues, P802.1ASdr editor, presented "802.1ASdr Editor's Update" https://www.ieee802.org/1/files/public/docs2022/dr-Rodrigues-editors-update-0322-v00.pdf.

   Disposition: For information. It was noted that the new terminology from IEEE P1588g will be "timeTransmitter" and "timeReceiver"
5. SC6 Status. Karen Randall presented "ISO/IEC JTC1 SC6 STATUS January 2022" slides in "Maintenance Task Group Electronic Meetings" https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-0322-2-v01.pdf.
   Disposition: For information.
6. Liaisons. The Maintenance TG chair with help from Karen Randall led the discussion of incoming liaisons and outgoing liaison responses.
   - IEEE 1588: Liaison Statement on inclusive terminology https://www.ieee802.org/1/files/public/docs2022/liaison-IEEE1588-InclusiveTerminologyCC-0322.pdf
   - IEEE 802.3: Liaison from IEEE 802.3 re: status of IEEE P802.3cx Task Force and Draft IEEE P802.3cx D2.2 https://www.ieee802.org/1/files/public/docs2022/liaison-IEEE802d3-ShareDraft802d3cxd2_2-0322.pdf
   - ITU-T SG15: LS351: OTNT Standardization Work Plan Issue 30 lhttps://www.ieee802.org/1/files/public/docs2022/liaison-sg15-LS351-OTNTStdznWorkPlan-0122.zip
   - ITU-T Joint Coordination Activity (JCA): LS on Invitation to update the information in the IMT2020 roadmap https://www.ieee802.org/1/files/public/docs2021/liaison-ITU-T-JCA-IMT2020roadmap-0122.pdf
   - FDIS ballot comments on IEEE 802.1X-2020 (SC6 N17643) https://isotc.iso.org/livelink/livelink?func=ll&objId=22103732&objAction=Open&viewType=1
   Disposition: The incoming liaisons were reviewed, but due to lack of time, the finalization of the responses was left for the Friday Mar 11, 2022 meeting. It was agreed (informally, none dissenting) to only include projects in the WG balloting or later stage in the IMT-2020 response.
7. P802.1Q-Rev/D1.0 Comment Resolution. Mick Seaman, editor P802.1Q-Rev, led comment resolution.
   Disposition: Comment disposition was completed. Comments 77, 81 and 96 were discussed. Available proposed dispositions https://1.ieee802.org/maintenance/p802-1q-rev/

16:03 ET recess

Call to order Mar 11, 2022 at 14:01 ET by Paul Congdon, IEEE 802.1 Maintenance TG Chair who presided and wrote the minutes.

The Maintenance TG Chair announced that this ad hoc 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. Final review of Maintenance motions. The Maintenance TG chair reviewed the proposed motions for the 802.1 closing plenary meeting from "Maintenance Motion Summary" in https://www.ieee802.org/1/files/public/docs2022/maint-congdon-em-0322-1-v02.pdf
   Disposition: For information.
9. Liaison response finalization. The Maintenance TG Chair and Karen Randall, Liaison Secretary, reviewed the draft liaison responses.
   Disposition: Responses were drafted, finalized as follows:
   - Responses to comments JTC1 ballot of IEEE Std 802.1X-2020 (ISO/IEC/IEEE FDIS 8802-1X) https://www.ieee802.org/1/files/public/docs2022/liaison-SC6CommentResponse1XFDIS-0322.pdf
   - Response to Invitation to update the information in the IMT2020 roadmap https://www.ieee802.org/1/files/public/docs2022/liaison-itu-t-JCA-RoadmapIMT2020Response-0322.pdf
10. P802-Rev PAR Comment Response. Roger Marks, Nendica Chair, led the review of PAR comments on the P802-Rev PAR from other 802 Working Groups. https://mentor.ieee.org/802.1/dcn/22/1-22-0006-01-ICne-suggested-responses-to-comments-on-ieee-std-802-revision-par.pdf
    Disposition: Updated draft PAR for submission to NesCom https://www.ieee802.org/1/files/public/docs2022/802-rev-PAR-0322-v03.pdf.
11. Existing Maintenance Items: The Maintenance TG chair led the discussion of the following existing maintenance items:
    - 0242: IEEE Std 802.1Qcp-2018: Collected issues on data consistency and others
    - 0248: Managed objects for ECP in 802.1Q-2018
    - 0311: 802.1Q: Resolution of stream filters with wildcard stream_handle specification
    - 0314: network media and PHY
    - 0324: Use of Tick in List Execute state machine (802.1Q)
    - 0325: AVB latency calculation
    - 0330: Incorrect definition of BucketEmptyTime in IEEE Std 802.1Qcr-2020
    - 0333: Wildcard support for tsnCpeNullDownDestMac
    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'.
12. Any Other Business. It was asked if P802.1Q-Rev should be asking for conditional approval to submit to RevCom. After checking the RevCom schedule, it was agreed to not propose such a motion in the 802.1 closing plenary meeting. No other business was discussed by the Maintenance TG in this session.
13. Future meetings. Agreed (informally, none dissenting) to hold an electronic meeting of the Maintenance TG to review P802.Q-Rev/D1.1 and plans for the SA recirculation ballot on Mar 29, 2022 at 11:00 ET https://1.ieee802.org/maintenance-tg-electronic-meeting-agenda-march-29-2022-11-am-et/.

15:19 ET adjournment

7 Security Task Group

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

- Minutes of the Security TG meeting held 2022-02-08 13:00 - 14:23 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c61b745.22&S=

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 Mar 8, 2022 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/march-2022-plenary-session-electronic-security-tg-agenda/
    Disposition: The agenda was reviewed, discussed and updated as recorded by these minutes.
3. P802.1AEdk MAC Privacy protection.
    Mick Seaman, IEEE Std 802.1AE Editor, presented the updated MAC Privacy protection draft P802.1AEdk/D1.8 https://www.ieee802.org/1/files/private/dk-drafts/d1/802-1AEdk-d1-8.pdf.
    This draft represented the (near) conclusion of technical and editorial alignment of P802.1AEdk with the base 802.1AE sources, taking into account planning for a roll-up edition of 802.1AE as soon as practicable after P802.1AEdk publication.
    Significant changes from https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7.pdf (D0.7). A few items will need continued review, as noted in discussion.
    Discussion:
    - Close to ready for WG ballot. Identify outstanding issues to clear up prior to ballot during the course of this session. Plan for motion for WG ballot at closing 802.1 plenary meeting.
    - Maintenance item for potential use of MACsec in addition to (not as a replacement for) Wi-Fi security covered in the Introduction (not formally part of the draft), replacing "not intended for use with" by "not intended as a substitute for".
    - D0.7 TG ballot comment 21 re: use of 802.11 MAC proxies to hide MAC addresses. The general application of a proxy somewhere in the network is not an

easy fit the hop-by-hop protection provided by MACsec, except for the case where MACsec is terminated by the next device. 802.1 standards do not in general use the multiple MAC address formats supported directly by 802.11.

- D0.7 TG ballot comment 34. The question of how PTP packets for timestamping should be carried is really an 802.1AS discussion/decision. Those packets might leak some privacy information. If carried without MAC Privacy protection they would disclose user addresses, though that could be unimportant for infrastructure links. If protected in individual Privacy Frames they could be subject to a small additional fixed delay (assuming a fixed delay MACsec implementation). Transmission in a Privacy Channel, taking advantage of the efficiency of the channel, would add variable delay.
- D0.7 TG ballot comment 120. Constraints on reassembly sizes should be addressed.
- D0.7 TG ballot comment 135. Text for definite bounds on encoding delay is missing.
- 12:35 ET recess
- **Call to order** Mar 10, 2022 at 11:05 ET by Mick Seaman, IEEE 802.1 Security TG Chair.

Disposition
- Updated disposition of TG ballot comments received on https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7.pdf: https://www.ieee802.org/1/files/private/dk-drafts/d0/802-1AEdk-d0-7-dis.pdf

Don Fedyk, P802.1AEdk Editor, led a review of the YANG and MIBs in https://www.ieee802.org/1/files/private/dk-drafts/d1/802-1AEdk-d1-8.pdf.
Discussion:
- Currently no input for Controlled/Uncontrolled Port friendly names.
- MIB warning "'SecySCI' has no format specification" to be resolved.
- Length of CAK Key Name (CKN) in 802.1X and the length and type of string in YANG need checking. May be influenced by IETF Keystore RFC.

Disposition: For information.

Mick Seaman, IEEE Std 802.1AE Editor, led a discussion of P802.1AEdk editorial items https://www.ieee802.org/1/files/public/docs2022/dk-seaman-editorial-nits-2203v0.txt to be addressed prior to WG ballot.
Disposition: Motion for P802.1AEdk WG ballot proposed for 802.1 closing plenary meeting. P802.1AEdk/D1.9 to be prepared to incorporate items discussed in this session for checking in an electronic meeting prior to issuing the WG ballot.

4. Any Other Business (AOB)
4.1 IETF Keystore RFC
A discussion of the Keystore RFC had been scheduled for the YANGsters meeting to take place later in the day.

12:35 ET recess

Call to order Mar 11, 2022 at 11:00 ET by Mick Seaman, IEEE 802.1 Security TG Chair.

4.1 IETF Keystore RFC (continued)

Karen Randall, 802.1 Security TG Vice Chair, reported on the IETF RFC Keystore discussion in YANGsters.

Discussion:

- Draft for storing keys using YANG to access.
- RFC about to go to publication. Addressing liaison with 802.1 was the final step. Not necessary to revise their draft but they will send a liaison back to 802.1 documenting discussion.
- Issues identified in 802.1 liaison are probably a consequence of loose terminology, e.g., "key": three kinds of keys: hidden, encrypted, cleartext. Also there are handles to key and not the key data itself. So the term key might refer to the "raw" key, the yang node, or a "key" to a list.

Disposition: The following action items for the IETF RFC authors were agreed (informally, none dissenting) to conclude the liaison discussion:

- Liaison response indicating that conformance to standards spanning SDOs meet the strictest requirement of the combination so far as possible disclosure of security sensitive material, such as cryptographic keys, is concerned.
- Keystore draft to adequately indicate which type of "key" is referred to on a case-by-case basis.
- Keystore draft to indicate that built-in keys should not be clear text.
- Crypto-types draft to adequately define "hidden" key (not, on consideration, an issue as the "crypto-types" draft text defines "hidden keys" by stating that symmetric and asymmetric keys "cannot be presented via the management interface").

4.2 Post-quantum considerations for 802.1 security standards. Mick Seaman presented "Notes on post-quantum considerations for 802.1 security standards" https://www.ieee802.org/1/files/public/docs2022/ae-seaman-post-quantum-notes-0322v0.txt.

Discussion:

- IEEE had received a PAR proposal for the creation of a new 802 WG to standardize the use of quantum resistant keys for data transport protocols (in the apparent absence of current 802 work on the subject) including (example given in subsequent discussions) MACsec and IPsec.
- Data transport protocols, including MACsec, use symmetric keys. Quantum resistance is provided by doubling the key length. The current NSA/NIST recommendation is for a 256-bit symmetric key, and the necessary steps to support this key length were included in IEEE Std 802.1AEbn-2011 Media Access Control (MAC) Security Amendment 1: Galois Counter Mode—Advanced Encryption Standard—256 (GCM-AES-256) Cipher Suite.
- The MACsec Key Agreement protocol that agrees the data keys (SAKs) used by MACsec also uses keys derived from a symmetric key (the CAK) with support for 256-bit keys included in the initial standardization of MKA in IEEE Std 802.1X-2010 (current standard IEEE Std 802.1X-2020). The CAK is either provided as a PSK/PPK (pre-shared key or pre-placed key) or derived from the results of an authentication exchange/key exchange based on asymmetric keys (which require sophisticated post quantum support).

- NIST Post-Quantum Cryptography FAQs can be found at https://csrc.nist.gov/Projects/post-quantum-cryptography/faqs. Dr Lily Chen, who has attended Security TG meetings in the past, is a lead NIST contact and is willing to attend a future meeting to keep the Security TG up to date on progress towards standards for post-quantum asymmetric key support.
- NIST standards currently expected 2023/2024. More detail in the "NIST Status Update on the 3rd Round" https://csrc.nist.gov/CSRC/media/Presentations/status-update-on-the-3rd-round/images-media/session-1-moody-nist-round-3-update.pdf
- Per "National Security Agency | Frequently Asked Questions | Quantum Computing and Post-Quantum Cryptography" https://media.defense.gov/2021/Aug/04/2002821837/-1/-1/1/Quantum_FAQs_20210804.PDF, "NSA considers the use of pre-shared symmetric keys in a standards-compliant fashion to be a better near-term post-quantum solution than implementation of experimental post-quantum asymmetric algorithms that may or may not be proven secure and which will not be compatible with NIST standards."

Disposition: Monitor NIST standardization progress and IETF efforts.

5. Future meetings. Agreed, informally none dissenting, to hold a Security TG meeting Apr 5, 2022 13:00 ET for a final check/review of P802.1AEdk (updated as per the discussion in this session) prior to WG Ballot (subject to 802.1 closing plenary meeting motion approval).

11:57 ET adjournment

8 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 2022-01-24 11:00 - 13:10 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;3beea47f.22&S=
- Minutes of the IEEE 802.1 TSN TG meeting held 2022-01-31 11:00 - 13:01 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c73e88e0.22&S=
- Minutes of the IEEE 802.1 TSN TG meeting held 2022-02-07 11:00 - 12:56 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;dbb476ae.22&S=
- Minutes of the TSN TG meeting held 2022-02-09 09:00 – 11:02 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;e3096805.22&S=
- Minutes of the IEEE 802.1 TSN TG meeting held 2022-02-14 11:00 - 13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;8660130b.22&S=
- Minutes of the IEEE 802.1 TSN TG meeting held 2022-02-21 11:00 - 13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;7a2e0691.22&S=
- Minutes of the IEEE 802.1 TSN TG meeting held 2022-02-28 11:00 - 13:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;a6b2a750.22&S=

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (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 2022-01-25 9:00 - 10:58 ET (revised) https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;21f05fe3.22&S=
- Minutes of the IEEE P802.1DG meeting held 2022-02-01 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;48681608.22&S=

- Minutes of the IEEE P802.1DG meeting held 2022-02-08 9:00 - 11:00 ET (revised)
https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;7af9a23a.22&S=
- Minutes of the IEEE P802.1DG meeting held 2022-02-15 9:00 - 11:01 ET
https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;461377d9.22&S=
- Minutes of the IEEE P802.1DG meeting held 2022-02-22 9:00 - 10:50 ET
https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;df808f47.22&S=
- Minutes of the IEEE P802.1DG meeting held 2022-03-01 9:00 - 11:00 ET
https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;ab368fc6.22&S=

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.

Minutes of the IEC/IEEE 60802 Joint Project electronic meetings are in section 8.1.

Minutes of the IEEE P802.1DP/SAE AS 6675 joint project electronic meeting are in section 8.2.

Call to order Mar 07, 2022 at 14:31 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 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/2022-03-plenary-tsn-agenda/.
Disposition: The agenda was reviewed, discussed and updated as recorded by these minutes.
3. Jessy Rouyer presented "LS on Initiation of approval process for revised G.8012, G.8021, and G.8032 corrigendum" https://www.ieee802.org/1/files/public/docs2022/liaison-SG15-LS353-InitiateapprovalprocessrevisedRecs-0122.pdf.
Disposition: Liaison discussed.
4. Malcolm Smith presented "WI-FI 6/6E INDUSTRIAL IOT (IIOT)" https://www.ieee802.org/1/files/public/docs2022/liaison-WBA-WiFi6E-WTSN-IIOT-0322-v02.pdf.
Disposition: Presentation discussed.
5. The TSN TG Chair led the discussion on "Liaison Statement to IEEE 802.1 – WBA Industrial IoT Deliverable" https://www.ieee802.org/1/files/public/docs2022/liaison-WBA-Industrial-IOT-WiFideterminism-0122.pdf.
Disposition: Liaison discussed.
6. Henning Kaltheuner and Genio Kronauer presented "ProAV requirements" https://www.ieee802.org/1/files/public/docs2022/new-Kaltheuner-Kronauer-ProAV-requirements-0322-v01.pdf.
Disposition: Presentation discussed.
7. Andreas Meisinger presented "Proposed RAP Extensions for the "Centralized network/distributed user model" & Scheduling Based on LRP on TCP with proxies for controlled bridges" https://www.ieee802.org/1/files/public/docs2022/dd-meisinger-configuration-model-support-using-RAP-with-LRP-proxy-0322-v03.pdf.
Disposition: Presentation discussed.

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

16:31 ET recess

Call to order Mar 08, 2022 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.

9. The TSN TG Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
   The TSN 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.
10. Max Turner led the resolution of comments received on
    https://www.ieee802.org/1/files/private/dg-drafts/d1/802-1DG-d1-4.pdf.
    Disposition: Partial disposition. Comments 19, 106, 123, 150, 181, 185, 190, 192, 296, 431, 432, 434, 451, 493, 514, 518, 519, 527, 528, 529 discussed and resolved as documented in https://www.ieee802.org/1/files/private/dg-drafts/d1/802-1DG-d1-4-pdis-v08.pdf.

11:00 ET recess

Call to order Mar 09, 2022 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.

11. 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.
12. Norman Finn, P802.1DC editor, led the resolution of comments received on
    https://www.ieee802.org/1/files/private/dc-drafts/d1/802-1DC-d1-2.pdf.
    Disposition: Final disposition: https://www.ieee802.org/1/files/private/dc-drafts/d1/802-1DC-d1-2-dis.pdf.

11:03 ET recess

Call to order Mar 09, 2022 at 14:00 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

13. 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.
14. Stephan Kehrer, P802.1Qdj editor, presented "TSN Domain definition"
    https://www.ieee802.org/1/files/public/docs2022/dj-kehrer-TSN-Domain-0322-v01.pdf.
    Disposition: Presentation discussed.
15. Stephan Kehrer, P802.1Qdj editor, led the resolution of comments received on
    https://www.ieee802.org/1/files/private/dj-drafts/d0/802-1Qdj-d0-2.pdf.
    Disposition: Partial disposition. Disposition of comment 88 discussed and updated as documented in https://www.ieee802.org/1/files/private/dj-drafts/d0/802-1Qdj-d0-2-pdis-v05.pdf.

16:09 ET recess

Call to order Mar 10, 2022 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.

16. 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.

17. Geoffrey Garner, P802.1ASdm editor, presented "P802.1ASdm-Rev/D0.5 Editor's Report" https://www.ieee802.org/1/files/public/docs2022/dm-garner-d0-5-tg-ballot-editors-report-0322-v00.pdf and led the resolution of comments received on https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-5.pdf.
Disposition: Partial disposition. Comments 21, 83, 36, 37, 38, 39, 67, 68, 7, 40, 53, 34, 54, 14, 33, 51, 79, 32, 47 discussed and resolved as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-5-pdis-v01.pdf.

11:04 ET recess

Call to order Mar 10, 2022 at 14:00 ET by Craig Gunther, IEEE 802.1 TSN TG Vice-Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

18. The TSN TG Vice-Chair announced that the meeting remains subject to the Policies mentioned in agenda item 1.
The TSN 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.

19. Max Turner, P802.1DG editor, continued leading the resolution of comments received on https://www.ieee802.org/1/files/private/dg-drafts/d1/802-1DG-d1-4.pdf.
Disposition: Partial disposition. Comments 499, 506, 531, 442, 543, 500, 443, 502, 148, 295, 503, 508, 151, 444, 445, 421, 427 discussed and resolved as documented in https://www.ieee802.org/1/files/private/dg-drafts/d1/802-1DG-d1-4-pdis-v08.pdf.

15:52 ET recess

Call to order Mar 11, 2022 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.

20. 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.

21. Lily Lv led the resolution of comments received on https://www.ieee802.org/1/files/public/docs2022/dt-draft-PAR-0122-v01.pdf and https://www.ieee802.org/1/files/public/docs2022/dt-draft-CSD-0122-v01.pdf.
Disposition:
Updated PAR: https://www.ieee802.org/1/files/public/docs2022/dt-PAR-0322-v01.pdf.
Updated CSD: https://www.ieee802.org/1/files/public/docs2022/dt-CSD-0322-v01.pdf.
Comment responses: https://www.ieee802.org/1/files/public/docs2022/dt-PAR-CSD-comments-0322-v01.pdf.

09:29 ET recess

Call to order Mar 11, 2022 at 11:30 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 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. Johannes Specht led the resolution of comments received on https://www.ieee802.org/1/files/public/docs2022/du-draft-PAR-0122-v01.pdf and https://www.ieee802.org/1/files/public/docs2022/du-draft-CSD-0122-v01.pdf.
Disposition: More discussions needed.

13:45 ET recess

Call to order Mar 14, 2022 at 09:01 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

24. 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.
25. Xueqin Jia and Tongtong Wang presented "Practice of "TSN-IP" over 5G carrier networks" https://www.ieee802.org/1/files/public/docs2022/df-jiaxq-TSN-Practice-over-carrier-networks-0322-v3.pdf.
Disposition: Presentation discussed.
26. Tongtong Wang presented "5G + TSN Testbed Progress" https://www.ieee802.org/1/files/public/docs2022/df-zhujy-5GTSN-testbed-0322-v01.pdf.
Disposition: Presentation discussed.
27. Norman Finn presented "Proposed PAR for IEEE Std 802.1Q amendment for CQF Enhancements" https://www.ieee802.org/1/files/public/docs2022/new-finn-CQF-enhancements-PAR-0322-v02.pdf and https://www.ieee802.org/1/files/public/docs2022/new-finn-CQF-enhancements-CSD-0322-v02.pdf.
Disposition: Presentation discussed.

10:38 ET recess

Call to order Mar 14, 2022 at 12:02 ET by János Farkas, IEEE 802.1 TSN TG Chair, who presided. Christian Boiger, IEEE 802.1 TSN TG Secretary, wrote the minutes.

28. 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.
29. Paul Congdon presented "Source Flow Control Project Proposal" https://www.ieee802.org/1/files/public/docs2022/new-congdon-SFC-proposal-0322-v01.pdf.
Disposition: Presentation discussed.
30. Rodney Cummings, P802.1ASdn editor, presented "IEEE P802.1ASdn (YANG Data Model), Introduction to Draft D0.1" https://www.ieee802.org/1/files/public/docs2022/dn-cummings-d0-1-intro-0322-v02.pdf.
Disposition: Presentation discussed.

31. Feng Chen, P802.1Qdd editor, presented "IEEE P802.1Qdd Resource Allocation Protocol (RAP) Editor's Update for Draft 0.6" https://www.ieee802.org/1/files/public/docs2022/dd-chen-D0-6-editors-update-0322-v01.pdf
    Disposition: Presentation discussed.
32. Don Pannell presented "10BASE-T1S support in P802.1ASds | A proposed way forward" https://www.ieee802.org/1/files/public/docs2022/ds-pannell-10BASE-T1S-aWayForward-0322-v01.pdf.
    Disposition: Presentation discussed. Updated presentation: https://www.ieee802.org/1/files/public/docs2022/ds-pannell-10BASE-T1S-aWayForward-0322-v02.pdf.

14:01 ET recess

Call to order Mar 14, 2022 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.

33. 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.
34. The TSN TG Chair led the discussion on https://www.ieee802.org/1/files/public/docs2022/du-draft-PAR-0122-v01.pdf and https://www.ieee802.org/1/files/public/docs2022/du-draft-CSD-0122-v01.pdf.
    Disposition: More discussions needed. Motions for 802.1 closing plenary meeting approval postponed. Motion for 802.1 closing plenary meeting approval to present status at 802.3 closing plenary and to request joint meetings with 802.3.
35. 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-d0-5.pdf.
    Disposition: Partial disposition. Comments 30, 31, 50 discussed and resolved as documented in https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-5-pdis-v01.pdf.

16:35 ET adjournment

8.1 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 2022-01-24 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;7e4d45fe.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-01-28 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;97cf5222.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-01-31 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;dbfc9226.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-04 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;3d3ef47d.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-07 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;41f87214.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-09 11:00 - 12:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;5c69152e.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-11 9:00 - 11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;5c69152e.22&S=

- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-14 9:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;d23bcd1b.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-18 9:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;62dc8aa2.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-21 9:00 - 10:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;c07b91c5.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-23 9:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;94f1cd5d.22&S=
- Minutes of the IEC/IEEE 60802 Joint Project meeting held 2022-02-25 9:00 - 11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;bd88c3f7.22&S=

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 Mar 07, 2022 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 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.
   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.
   The TSN TG 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.
2. Approval of agenda. The 60802 Chair presented the agenda in https://1.ieee802.org/2022-03-plenary-tsn-agenda/#TSN_8211_IECIEEE_60802.
   Disposition: The agenda was reviewed, discussed, and updated as recorded by these minutes.
3. Update on the IEC 61802 conformity assessment project. The 60802 Chair noted that there is no significant news from the IEC 61802 conformity assessment project.
   Disposition: For information.

4. Editor's report. Jordon Woods, IEC/IEEE 60802 Joint Project Editor (60802 Editor), presented "Editor's Report 60802 Draft 1.3" https://www.ieee802.org/1/files/public/docs2022/60802-woods-D1-3-update-0322-v01.pdf and showed "IEC/IEEE 60802 Expected Contributions" https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-Dorr-d1-3-ExpectedContributions.pdf providing a summary list of expected contributions.
Disposition: For information.
5. Secure Device Identity. Oliver Pfaff presented "Secure Device Identity - Profile for TSN-IA" https://www.ieee802.org/1/files/public/docs2022/60802-Pfaff-et-al-Secure-Device-Identity-Profile-0322-v02.pdf.
Disposition: More discussion is needed.
6. D1.3 TG ballot comment resolution. The 60802 Editor continued the resolution of comments received on https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf.
Disposition: Partial disposition. Ballot comment 918 was discussed but not resolved.

12:30 ET recess

Call to order Mar 08, 2022 at 11:30 ET by Ludwig Winkel, 60802 Chair, who presided with Janos Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

7. Meeting introduction and other administrative items. The TSN 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. Time Sync Accuracy over 100 Hops. David McCall presented "60802 Dynamic Time Sync Error – Additions – Error due to drift during Sync messaging – Potential Contribution" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Stanton-Time-Sync-Error-Model-and-Analysis-2022-03-v01.pdf.
Disposition: More discussion is needed. A presentation of the Monte Carlo analysis results is planned for Mar 10, 2022, to be compared with upcoming new Time Series Simulation results.
9. D1.3 TG ballot comment resolution. The 60802 Editor continued the resolution of comments received on https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf.
Disposition: Partial disposition.
   - Ballot comment 918 was resolved.
   - The comment disposition is documented in https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3-pdis-v33.pdf.

13:30 ET recess

Call to order Mar 09, 2022 at 9:00 ET by Ludwig Winkel, 60802 Chair, who presided. Josef Dorr, 60802 Secretary, wrote the minutes.

10. Meeting introduction and other administrative items. The 60802 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.
11. D1.3 TG ballot comment resolution. The 60802 Editor continued the resolution of comments received on https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf.
    Disposition: Partial disposition.
    - Ballot comments 919, 502, 920, 503, 504, 923 were resolved.
    - The comment dispositions are documented in https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3-pdis-v33.pdf.
12. Translation tables/rules for IA-stations. Günter Steindl presented "Translation tables/rules for IA-stations - Requirements for Plug & Produce" https://www.ieee802.org/1/files/public/docs2022/60802-Steindl-TrafficTypeTranslation-0322-v01.pdf.
    Disposition: More discussion is needed.
13. Review of minutes. The draft minutes were reviewed under the lead of the 60802 Secretary.

10:45 ET recess

Call to order Mar 10, 2022 at 11:30 ET by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

14. Meeting introduction and other administrative items. The TSN 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. New Time Series Simulation Results for a 60802 Network, to help validate Monte Carlo Simulations.
    - Geoffrey Garner presented "New 60802 dTER Time Series Simulation Results for Comparison with Monte Carlo Simulation Results" https://www.ieee802.org/1/files/public/docs2022/60802-garner-mult-replic-time-series-simul-resutls-for-comparison-with-monte-carlo-simuls-0322-v01.pdf.
    - David McCall presented "60802 Dynamic Time Sync Error – Monte Carlo Analysis Results for Comparison with Time Series Simulations" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Time-Sync-Monte-Carlo-Results-for-Time-Series-Comparison-0322-v01.pdf.
    Disposition: More discussion is needed. Anticipated next:
    - Further investigation of Time Series Simulation Results of cases B and F.
    - Reconcile the error models between Time Series Simulation and the Monte Carlo Analysis.
    - Time Series Simulations based on slide 29 of David McCall's "60802 Dynamic Time Sync Error – Additions – Error due to drift during Sync messaging – Potential Contribution" https://www.ieee802.org/1/files/public/docs2022/60802-McCall-Stanton-Time-Sync-Error-Model-and-Analysis-0322-v01.pdf.
    - Use mean link delay averaging, NRR smoothing with N equals 8 and no median calculation.

- Discuss the implementation of drift rate error correction algorithms or approximations.

16. Review of minutes. The minutes were reviewed under the lead of the 60802 Secretary.

13:30 ET recess

Call to order Mar 11, 2022 at 9:00 ET by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

17. Meeting introduction and other administrative items. The 60802 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.

18. Digital Data Sheet. Nemanja Stamenic presented "Digital Station Description and Digital CNC Description for IEC/IEEE 60802 - Data Set Format and File Format" https://www.ieee802.org/1/files/public/docs2022/60802-Stamenic-Digital-Data-Sheet-0322-v03.pdf.
Disposition: Agreed (informally, none dissenting) that the contribution can be incorporated in the next draft of IEC/IEEE 60802.

19. NETCONF Usage. Nemanja Stamenic presented "Operational Network Management for IEC/IEEE 60802 - NETCONF Usage" https://www.ieee802.org/1/files/public/docs2022/60802-Stamenic-NETCONF-usage-concepts-0322-v03.pdf.
Disposition: Agreed (informally, none dissenting) that the contribution can be incorporated in the next draft of IEC/IEEE 60802.

20. Time Sync Requirements. Günter Steindl again presented "ClockTarget / ClockSource / ClockSlave / ClockMaster / LocalClock / PTP clock / ApplicationClock Requirements and assigned features" https://www.ieee802.org/1/files/public/docs2021/60802-Steindl-ClockTarget-and-ClockSource-1121-v05.pdf that Steindl had already presented during the Nov 2021 plenary session.
Disposition: Steindl could not finish the presentation by lack of time. Presentation of the remaining content is expected in a future meeting.

11:00 ET recess

Call to order Mar 14, 2022 at 9:00 ET by Ludwig Winkel, 60802 Chair, who presided with János Farkas, TSN TG Chair. Josef Dorr, 60802 Secretary, wrote the minutes.

21. Meeting introduction and other administrative items. The TSN 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.

22. Boundary Ports and gPTP. Günter Steindl presented "Boundary Ports and gPTP - Boundary Port Isolation Requirements and assigned features" https://www.ieee802.org/1/files/public/docs2022/60802-Steindl-Boundary-Port-Isolation-0322-v01.pdf. The presentation was discussed to clarify issues that arose during previous presentation at the Nov 2021 plenary session.
Disposition: More discussion is needed.

23. 60802 Motions. The 60802 Chair led a discussion to add a motion to the closing plenary meeting to authorize work on an IEC/IEEE 60802 PAR scope modification. The PAR modification should only be worked on if really needed by the project.
Disposition: Agreed (informally, none dissenting) to provide such a motion.

24. D1.3 TG ballot comment resolution. The IEC/IEEE 60802 Editor continued the resolution of comments received on https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3.pdf.
    Disposition: Partial disposition.
    - Ballot comments 115, 116, 21, 505, 939, 938 were resolved.
    - Ballot comment 954 was revised based on feedback from a commenter.
    - The comment dispositions are documented in https://www.ieee802.org/1/files/private/60802-drafts/d1/60802-d1-3-pdis-v33.pdf.

11:00 ET adjournment

8.2 IEEE P802.1DP/SAE AS6675 joint project

Between this session and the preceding session, the IEEE 802.1 Time-Sensitive Networking (TSN) Task Group (TG) held electronic meetings on P802.1DP/SAE AS6675 whose minutes are incorporated to these session minutes by reference as follows:
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2022-02-02 10:00 - 12:04 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;6fbbf142.22&S=.
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2022-02-16 10:00 - 12:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;ba2f8a07.22&S=.
- Minutes of the IEEE P802.1DP/SAE AS6675 meeting held 2022-03-02 10:00 - 11:33 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;1b8e5a70.22&S=.

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 Mar 9, 2022 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.

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.
   János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, announced that the meeting is subject to these Policies as read and displayed at the opening plenary meeting.
   János Farkas, IEEE P802.1DP/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.
   János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, explained that the IEEE P802.1DP/SAE AS6675 Joint Project also follows the usual SAE IP and copyright https://www.sae.org/about/legal-policies/intellectual-property policies.
2. Approval of agenda. János Farkas, IEEE P802.1DP/SAE AS6675 co-Chair, presented the agenda in https://1.ieee802.org/2022-03-plenary-tsn-agenda/#TSN_8211_P8021DPAS6675.
   Disposition: The agenda was reviewed, discussed and agreed (informally, none dissenting) as presented.

3. Max Turner presented "Review of time redundancy in Automotive"
https://www.ieee802.org/1/files/public/docs2022/dm-turner-ASredundancy-0322-v01.pdf.
Disposition: Presentation was discussed. More discussion is needed.

13:50 ET adjournment

9 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 2022-01-27 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;f3d63e6a.22
- Minutes of the Nendica meeting held 2022-02-03 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;e34a9fe8.22
- Minutes of the Nendica meeting held 2022-02-10 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;7b3f87a3.22
- Minutes of the Nendica meeting held 2022-02-17 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;70d23309.22
- Minutes of the Nendica meeting held 2022-02-24 09:00-11:00 ET
  https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4b24a735.22

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 March 10, 2022 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 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 the Nendica meeting, 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. Additions to the Mentor server document list were noted.
   Disposition: The agenda was reviewed and agreed (informally, none dissenting) as https://1.ieee802.org/802-nendica-agenda-2022-03-10/.
3. Minutes. The Nendica Chair reviewed the draft "Minutes of the Nendica meeting held 2022-02-24 09:00-11:00 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;4b24a735.22.
   Disposition: Agreed (informally, none dissenting) to approve the minutes as presented.
4. Update. No discussion.

5. Nendica organization. The Nendica Chair noted that the Nendica status report https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2022&is_dcn=0004, completed on Feb 24, 2022, had been presented to the Mar 7, 2022 IEEE 802.1 WG opening plenary meeting as agreed.

6. ELLA Study Item. Roger Marks presented "Suggested responses to comments on IEEE Std 802 Revision PAR, Rev. 0" https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2022&is_dcn=0006. Three comments had been received, by the prior day's deadline, on the proposed PAR to revise IEEE Std 802. The contribution suggested that Nendica should aid the 802.1 Maintenance Task Group (TG), which is scheduled to develop comment responses on Mar 11, 2022, by proposing comment resolutions. The contribution proposed resolutions to the three comments.
   Disposition: Agreed (informally, none dissenting) on a set of comment resolution in a revision (Rev. 1). The document will not be formally transmitted to the Maintenance TG, but the Maintenance TG Chair is anticipated to introduce it there.
   Marks briefly noted contribution "Proposed Draft ELLA Report on Amendment of IEEE Std 802, Rev. 4" https://mentor.ieee.org/802.1/documents?is_group=ICne&is_year=2021&is_dcn=0080, reiterating that this is a proposed extension of the ELLA Report, proposing that the extension should be adopted in May 2022 and should include recommendations regarding a PAR and CSD for one or more amendments to IEEE Std 802.
   Discussed was a proposed motion, for the 802.1 WG Closing Plenary meeting, on pre-circulation of a PAR/CSD for an amendment to IEEE Std 802. The draft motion, which was included in the report that Nendica had developed for the Mar 7, 2022 802.1 WG opening plenary meeting, said:
   "802.1 authorizes pre-circulation to the July IEEE 802 Plenary Session of one or more PARs/CSDs to amend IEEE Std 802, as reviewed in the Maintenance Task Group, based on a Nendica report on the topic and considering information from the 802 Technical Plenary."
   Disposition: Agreed (informally, none dissenting) that the draft motion be raised by the Maintenance TG at the 802.1 WG Closing Plenary meeting. The suggestion will not be formally transmitted to the Maintenance TG, but the Maintenance TG Chair is anticipated to introduce it there.

7. CTF Study Item. No discussion.

8. Vetting. No discussion.

9. Future Meetings. Discussed plan to request 802.1 WG authorization for meetings up to the Jul 2022 802 plenary session, renewing the authorization from Nov 2021.
   Disposition: Agreed (informally, none dissenting) to propose a motion at the 802.1 WG closing plenary meeting, as follows:
   "DRAFT MOTION for 802.1:
   802.1 authorizes Nendica to hold weekly electronic meetings each Thursday 09:00-11:00 ET starting March 24, 2022.
   Agenda to be announced subject to notice of at least 5 calendar days at the 802.1 Minutes email reflector.
   Access and agenda information are provided on the calendar at https://1.ieee802.org/802-nendica/.
   802.1 authorizes Nendica to hold additional meetings as announced at least 10 days in advance.
   Dates, times and agenda to be announced subject to notice of at least 10 days to the 802.1 Minutes email list
   Access and agenda information are provided on the calendar at https://1.ieee802.org/802-nendica/."
   The next Nendica meeting is tentatively scheduled for March 24, 2021, 09:00-11:00 ET.

The tentative agenda for that meeting is at https://1.ieee802.org/802-nendica-agenda-2022-03-24/. Those seeking agenda time should notify the Nendica Chair at least six days in advance.
10. Any Other Business. Mick Seaman had uploaded two contributions during the course of the meeting for introduction: they will be on the agenda of the Mar 24, 2022 Nendica meeting.

10:21 ET adjournment

10 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 2022-02-01 10:00 –10:55 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;6a7cc446.22&S=
- Minutes of the YANGsters meeting held 2022-02-15 10:00 –11:03 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;85a0a895.22&S=
- Minutes of the YANGsters meeting held 2022-02-22 10:01 –11:03 ET https://listserv.ieee.org/cgi-bin/wa?A2=STDS-802-1-MINUTES;ce0cd9d7.22&S=

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 Mar 10, 2022 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/march-2022-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/.
   - The meeting cadence for YANGsters has been weekly. It is intended to change the cadence to a bi-weekly meeting starting at this plenary meeting.
   Disposition: For information.
4. Status: QRev update. The YANGsters Chair presented the P802.1Q-Rev/D1.1 YANG modules at https://github.com/YangModels/yang/tree/master/standard/ieee/draft/802.1/QRev and led the discussion.
   - The UML-like diagrams in https://www.ieee802.org/1/files/private/q-rev-drafts/d1/802-1Q-rev-d1-1.pdf are all complete and no further updates to these diagrams are expected before the next ballot circulation.

- The UML Diagram Guideline updates at https://1.ieee802.org/uml-like-diagrams/ were presented and discussed.
  - Further updates on the shading guidelines are required.
  - The diagram of the "YANG root hierarchy with IEEE 802.1Q YANG modules" needs to be updated to make it clearer.
  - The work done in P802.1Q-Rev should be leveraged to update the guidelines.

  Disposition: For information.

5. Status: CBcv/CBdb update. The YANGsters chair provided a summary of the topic.
   - IEEE Std 802.1CBcv-2021 was published Feb 18, 2022.
   - The MIB and YANG modules from IEEE Std 802.1CBcv-2021 are available at https://1.ieee802.org/mib-modules/ and https://1.ieee802.org/yang-modules/.
   - IEEE P802.1CBdb is in the final stages of pre-publication editing.
   - The latest YANG files for both need to be moved to https://github.com/YangModels/yang/tree/main/standard/ieee/published/802.1.

   Disposition: For information.

6. Status: ABcu update. The YANGsters chair provided a summary of the topic.
   - Final editing is just starting. Required YANG updates are expected to be only editorial in nature.
   - The YANG modules for https://www.ieee802.org/1/files/private/abcu-drafts/d2/802-1ABcu-D2-3.pdf are at https://github.com/YangModels/yang/tree/master/standard/ieee/draft/802.1/ABcu.
   - There was a question on the availability of the LLDP YANG modules that cover the same managed objects that are covered in LLDP-EXT-DOT3-V2-MIB-200906080000Z.mib.
     - This information is currently missing but is required for IEC/IEEE 60802.
     - The IEEE 802.3.2 YANG modules are located at https://github.com/YangModels/yang/tree/main/standard/ieee/published/802.3.
     - It is assumed that the LLDP YANG module is in the responsibility of IEEE 802.3.
     - It was suggested to start a discussion with IEEE 802.3 to see how these YANG files can be created and made available.
     - It also was suggested that the discussion could take place in YANGsters.

   Disposition: Agreed (informally, none dissenting) that more discussion is needed.

7. Status: IEEE 1588 YANG update. The IEEE P802.1ASdn editor presented "IEEE P802.1ASdn (YANG Data Model),Introduction to Draft D0.1" https://www.ieee802.org/1/files/public/docs2022/dn-cummings-d0-1-intro-0322-v01.pdf.
   - Currently there is no intention to add managed objects that may be introduced by P802.1ASdm to the P802.1ASdn YANG modules.
   - It is, however, possible to include the managed objects from P802.1ASdm in the P802.1ASdn YANG modules.
     - There are two possible approaches to handle this that depend on the timing of the two projects.
       - If P802.1ASdn finishes first, P802.1ASdm could create a YANG augmentation of the YANG module provided by P802.1ASdn.
       - If P802.1ASdm finishes first, P802.1ASdn could directly include the new functionality in its YANG modules.
   - It was pointed out that some functionality is missing to allow full configuration of 802.1AS features for IEC/IEEE 60802 use.

- There was a discussion on how to best add these configuration options into the new YANG modules.

Disposition: Agreed (informally, none dissenting) that more discussion is needed.

8. Liaisons: The YANGsters Chair presented and led the discussion on the IETF "Liaison on a YANG Data Model for a Keystore" https://1.ieee802.org/yangsters/yangster-liaison-notes/.

- An overview of the liaison was provided.
- There are concerns that the "Keystore" draft identifies some items as truly optional "MAY". This can be perceived as overriding restrictions from other security standards, e.g., IEEE Std 802.1AR.
- A clarification is requested that where provisions of referenced security standards appear to conflict or restrict the operations described in the draft, those other security standards take precedence.
- A liaison response with such a statement is considered to be sufficient to address the concerns. It was expressed that it would be preferrable to have such a statement in the document but that is not strictly necessary.

Disposition: Agreed (informally, none dissenting) that more discussion is needed after a liaison response is received.

9. Instance Data Format. Martin Mittelberger presented "YANG Instance Data File Format RFC 9195 / RFC 8525" https://www.ieee802.org/1/files/public/docs2022/yangsters-mittelberger-instance-data-file-format-0322-v01.pdf and led the discussion.

- The question raised was whether the presented understanding of YANG instance data according to RFC 9195 and RFC 8525 is correct.
- It was confirmed that the example shown in the presentation is a valid implementation.

Disposition: Agreed (informally, none dissenting) that it would be helpful to send the questions raised in the presentation to the IETF mailing list. Also, it was suggested to give a presentation on the adoption of YANG in the Industrial Automation area in the IETF as well as in an IEEE 802.1 TSN TG meeting during an IEEE 802.1 plenary session.

10. Review of discussions since last plenary. Discussion was deferred by lack of time.
11. Review of YANG issues from recent ballots. Discussion was deferred by lack of time.
12. Future meetings. A motion is planned for the 802.1 closing plenary meeting to request the continuation of the YANGsters electronic meetings but change the meeting cadence to bi-weekly. YANGsters' next electronic meeting is Mar 29, 2022.

- Information on YANGsters electronic meetings can be found at https://1.ieee802.org/yangsters/yangsters-call-information/.

13. Any Other Business. No other business was discussed by YANGsters in this session.

16:01 ET adjournment

11 Closing Plenary Meeting

Call to order Mar 15, 2022 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/2022-03-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) who have not already announced themselves 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).
- Reminded participants of the various plenary session registration fees applying and attendant registration details (slide 17).
- Provided general information regarding meeting contributions, minutes, schedule for all Working Groups, website (slide 18).
- Recognized 802.1 officers and leadership (slide 19) and the editors of current projects (slide 20).
- Reminded participants and 802.1 voting members of obligations regarding 802.1 voting membership and how voting membership may be requested and retained (slide 21).
- Reminded 802.1 voting members of their obligations regarding responding to WG letter ballot series (WG ballots + E-Polls) as well as regarding the consequences of not responding to WG letter ballot series (slide 22).
- Reviewed the list of 802.1 voting members (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).
- Provided information about LMSC elections at this plenary session (slide 29), WG elections and candidates standing for re-election (slide 30), and DirectVoteLive (slide 31).
- Had the Vice-Chair conduct the Chair confirmation vote using the following motion that passed (slide 32):
  - Motion
    - 802.1 approves Glenn Parsons as the chair of the 802.1 working group
    - Proposed: Silvana Rodrigues
    - Seconded: Stephan Kehrer
    - Y: 53 N: 1 A: 3
- Conducted the Vice-Chair confirmation vote using the following motion that passed (slide 33):
  - Motion
    - 802.1 approves Jessy Rouyer as the vice-chair of the 802.1 working group
    - Proposed: Stephan Kehrer
    - Seconded: Silvana Rodrigues
    - Y: 51 N: 2 A: 3

- Had the Executive Secretary:
  - Present updated information on the May, Jul, Sep 2022 sessions (slides 34-38) and conducted the following straw poll (slide 39)
    - Would you prefer the IEEE 802.1 September 2022 Interim session, Sep 12-16 to be held as:
      - Electronic meeting
      - In-Person meeting (Hybrid or remote observers not supported)
        - A – electronic: 42
        - B – in-person: 29
        - C – no answer: 15
  - Present updated information on the May 2023 session (slides 40-42) and conducted the following straw poll (slide 43)
    - Which venue do you prefer for the IEEE 802.1 May 2023 Interim session, May 15-19, held as in-person meeting (Hybrid or remote observers not supported):
      - Helsinki, Finland (ABB offer)
      - Orlando, FL, USA (802 Wireless offer)
        - A – Helsinki   -   51
        - B – Orlando   -   21
        - C – no answer   -   15
  - Review the schedule for future interim (slide 44) and plenary (slide 45) sessions, and summarize future session decision dates (slide 46), all of which remained unchanged from the opening plenary meeting.
- Conducted the following EC straw polls (slides 47-49).
  - When do you expect the next in-person 802.1 session will be?
    - July 2022   -   33
    - Sept 2022   -   9
    - Nov 2022   -   7
    - Jan 2023   -   5
    - Mar 2023   -   7
    - July 2023   -   6
    - Sept 2023   -   2
    - Nov 2023 or later -   6
    - No answer   -   15
  - If the 2022 July Plenary Session is held in Montreal, Canada as an in-person only session, will you attend?
    - Yes   -   44
    - No   -   31
    - No answer   -   15
  - If the 2022 July Plenary Session is held in Montreal, Canada as a mixed-mode session, will you attend:
    - Attend In-person   -   34
    - Attend Virtually (remotely)   -   36
    - Will not attend plenary   -   2
    - No answer   -   17
- Discussed the 802 technical plenary meetings held so far and possible future such meetings to address specific technical problems across all 802 (slide 50).
- Provided the anticipation of next actions with respect to projects in the WG's current workload (slide 51).

- Pointed out the 802.1 PARs and CSDs (slide 52) and other 802 PARs, PAR modification, related CSDs (slide 53) that are up for vote or finalization during this IEEE 802 plenary session, noting the response to comments received on the P802.1DU PAR and CSD is deferred.
- Had the Liaison Secretary summarize liaison resources (slide 54) and the set of new and previously-received (slide 55) incoming liaisons, and lead the final review of draft liaison responses prepared and reviewed in 802.1 subgroups during this plenary session (slide 56).
- Discussed promotion of the work of the WG (slide 57).
- Requested that the subgroup Chairs provide reports on the activities of their subgroups (slide 58) during this plenary session (slide 59) (see individual subgroup minutes above for details) after showing the list of upcoming 802.1 leadership meetings (slide 60).
    - o The Maintenance TG Chair presented the report on slides 61-63.
    - o The Security TG Chair presented the report on slide 64.
    - o The TSN TG Chair, IEC/IEEE 60802 Joint Project Chair, and TSN TG Vice-Chair presented the report on slide 65.
    - o The Nendica Chair presented the report on slide 66.
    - o The YANGsters Chair presented the YANGsters report on slide 67.
- Provided guidance on using DirectVoteLive to vote on motions (slide 68).
- Showed the 802.1 consent agenda items for the LMSC closing plenary meeting (slides 69-70).
- Conducted votes on the following motions (slides 71-107) that all passed. (Supporting information is available in "Closing Plenary March 2022" finalized as https://www.ieee802.org/1/files/public/minutes/2022-03-closing-plenary-slides.pdf.)

Motions for 802 EC
Consent Agenda
PARs to NesCom

- o Motion
    - ▪ Approve forwarding P802-Rev PAR documentation in https://www.ieee802.org/1/files/public/docs2022/802-rev-PAR-0322-v03.pdf to NesCom
        - – No CSD for a maintenance PAR
    - ▪ In the WG, Proposed: Paul Congdon,   Second: Roger Marks
        - – PAR (y/n/a): 55, 1, 4
- o Motion
    - ▪ Approve forwarding P802.1Qdt PAR documentation in https://www.ieee802.org/1/files/public/docs2022/dt-PAR-0322-v01.pdf to NesCom
    - ▪ Approve CSD documentation in https://www.ieee802.org/1/files/public/docs2022/dt-CSD-0322-v01.pdf
    - ▪ In the WG, Proposed: Paul Congdon,   Second: Jessy Rouyer
        - – PAR (y/n/a): 50, 3, 8
        - – CSD (y/n/a): 47, 3, 8

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

- o Motion
    - ▪ Approve liaison of the following comment responses to ISO/IEC JTC1/SC6 under the PSDO agreement:
        - – IEEE 802.1X-2020
            - • https://www.ieee802.org/1/files/public/docs2022/liaison-SC6CommentResponse1XFDIS-0322.pdf
    - ▪ In the WG, Proposed: Paul Congdon   Second: Karen Randall
        - – Sending draft (y/n/a): 51, 2, 5
- o Motion
    - ▪ Approve https://www.ieee802.org/1/files/public/docs2022/liaison-itu-t-JCA-RoadmapIMT2020Response-0322.pdf as communication to ITU-T SG13 JCA IMT-2020 and beyond regarding invitation to update the information in the IMT-2020 roadmap, granting the IEEE 802.1 WG chair (or his delegate) editorial license.
    - ▪ In the WG, Proposed: Paul Congdon   Second: Karen Randall
        - – Sending draft (y/n/a):   50, 1, 7

Administrative
WG Motions

- o Motion
    - ▪ 802.1 approves the November 2021 (plenary) and January 2022 (interim) session minutes:
        - – https://www.ieee802.org/1/files/public/minutes/2021-11-minutes-v2.pdf
        - – https://www.ieee802.org/1/files/public/minutes/2022-01-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 May 9-13, 2022
    - ▪ Proposed: Stephan Kehrer
    - ▪ Second: János Farkas
    - ▪ In the WG (y/n/a):   48, 4, 2
- o Motion
    - ▪ 802.1 approves to hold an 802.1 electronic interim session September 12-16, 2022
    - ▪ Proposed: Stephan Kehrer
    - ▪ Second: Max Turner
    - ▪ In the WG (y/n/a): 36, 17, 5

Maintenance TG
WG Motions

- o Motion
  - 802.1 authorizes pre-circulation to the July IEEE 802 Plenary Session of one or more PARs/CSDs to amend IEEE Std 802, as reviewed in the Maintenance Task Group, based on a Nendica report on the topic and considering information from the 802 Technical Plenary.
  - Proposed: Paul Congdon
  - Second: Roger Marks
  - In the WG (y/n/a): 51, 3, 4
- 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/).
    - – 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
  - 802.1 authorizes Don Fedyk, the Editor of P802.1AEdk MAC Privacy protection, to prepare drafts for and conduct Working Group balloting.
  - Proposed: Mick Seaman
  - Second: Karen Randall
  - In the WG (y/n/a): 51, 1, 5
- o Motion
  - 802.1 authorizes the Security Task Group to hold electronic meetings to progress P802.1AEdk and task group matters arising:
    - – Dates/times to be announced subject to notice of at least 10 days to the 802.1 Minutes email list
  - Proposed: Mick Seaman
  - Second: Karen Randall
  - Approved by Acclamation

TSN TG
WG Motions

- o Motion
  - 802.1 authorizes Paul Bottorff, the Editor of P802.1Qcj Standard for Local and Metropolitan Area Networks: Bridges and Bridged Networks — Amendment: Automatic Attachment to Provider Backbone Bridging (PBB) services to prepare drafts for and conduct Working Group balloting.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - In the WG (y/n/a): 46, 1, 9

- o Motion
  - 802.1 authorizes Silvana Rodrigues, the Editor of P802.1ASds Standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications — Amendment: Support for the IEEE Std 802.3 Clause 4 Media Access Control (MAC) operating in half-duplex to prepare drafts for and conduct Task Group balloting.
  - Proposed: János Farkas
  - Second: Stephan Kehrer
  - In the WG (y/n/a): 52, 1, 4
- o Motion
  - 802.1 authorizes the May 2022 interim session to generate for pre-circulation to the EC an IEC/IEEE 60802 Time-Sensitive Networking Profile for Industrial Automation PAR modification and CSD update to add digital data sheet coverage.
  - Proposed: János Farkas
  - Second: Ludwig Winkel
  - In the WG (y/n/a): 44, 4, 8
- o Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the May 2022 interim session for pre-circulation to the EC for an amendment to IEEE Std 802.1Q to specify Enhancements to Cyclic Queuing and Forwarding.
  - Proposed: Norman Finn
  - Second: Johannes Specht
  - In the WG (y/n/a): 38, 9, 9
- o Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD at the May 2022 interim session for pre-circulation to the EC for an amendment to IEEE Std 802.1Q to specify mechanisms for Source Flow Control.
  - Proposed: Paul Congdon
  - Second: Geoff Garner
  - In the WG (y/n/a): 35, 7, 12
- o Motion
  - 802.1 authorizes the TSN TG to generate PAR and CSD for pre-circulation to the EC for the July 2022 plenary session for an IEEE 802.1 standard on Cut-Through Forwarding.
  - Proposed: Johannes Specht
  - Second: Dieter Proell
  - In the WG (y/n/a): 44, 5, 6
- o Motion
  - 802.1 authorizes the 802.1 WG chair to present status of P802.1DU to the 802.3 WG and request joint meetings to continue discussion.
  - Proposed: Johannes Specht
  - Second: Max Turner
  - In the WG (y/n/a): 47, 1, 3

- o Motion
  - 802.1 authorizes the TSN Task Group to hold electronic meetings weekly on Mondays 11:00-13:00 ET starting March 21, 2022.
  - 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

- o Motion
  - 802.1 authorizes the TSN Task Group to hold an electronic meeting together with IEEE P802.11-TGbe 10:00-12:00 ET on April 20, 2022.
  - 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
- o Motion
  - 802.1 authorizes the TSN Task Group to hold an electronic meeting to discuss common TSN for converged networks 9:00-11:00 ET on May 4, 2022.
  - Agenda will be announced on the 802.1 Minutes email reflector at least 10 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
- o 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 on 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: Ludwig Winkel
  - Approved by Acclamation
- o 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 and Fridays 9:00-11:00 ET starting March 18, 2022.
  - 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

- o 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 March 22, 2022.
  - 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
- o 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 March 30, 2022.
  - 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
- o Motion
  - Authorize the 802.1 WG to hold joint meetings with the 802.3 WG to discuss cut-through forwarding.
  - 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/ page and will be updated as necessary.
  - Proposed: Johannes Specht
  - Second: Max Turner
  - In the WG (y/n/a):   44, 2, 4

Nendica
WG Motions

- o Motion
  - 802.1 authorizes Nendica to hold weekly electronic meetings each Thursday 09:00-11:00 ET starting March 24, 2022.
    - – Agenda to be announced subject to notice of at least 5 calendar days at the 802.1 Minutes email list.
    - – Access and agenda information are provided on the calendar at https://1.ieee802.org/802-nendica/.
  - Proposed: Paul Congdon
  - Second: Johannes Specht
  - Approved by Acclamation

- o Motion
  - 802.1 authorizes Nendica to hold additional meetings as announced at least 10 days in advance.
    - Dates, times and agenda to be announced subject to notice of at least 10 days to the 802.1 Minutes email list.
    - Access and agenda information are provided on the calendar at https://1.ieee802.org/802-nendica/ .
  - Proposed: Lily Lv
  - Second: Roger Marks
  - Approved by Acclamation

YANGsters
WG Motions

- o Motion
  - 802.1 authorizes the YANGsters Group to hold bi-weekly (every two weeks) electronic meetings on Tuesdays 10:00-11:00 ET starting March 29, 2022.
    - 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 https://1.ieee802.org/yangsters/yangsters-call-information/ page and will be updated as necessary.
  - Proposed: Scott Mansfield
  - Second: Stephan Kehrer
  - Approved by Acclamation
- Called for Any Other Business (slide 108)
  - o Motion
    - 802.1 authorizes the TSN Task Group to hold an in-person session with IEC 65C/WG18 in the US or Europe to progress the 60802 joint project.
    - 30 days advance notice will be provided
    - Proposed: Mark Hantel
    - Seconded: Ludwig Winkel
    - Withdrawn
  - o No further business was discussed in this meeting.

13:11 ET adjournment

12 Next Session

May 9-13, 2022 electronic interim session.