IEEE 802.3 Working Group July 2023 Plenary Session

David Law
Chair, IEEE 802.3 Working Group
dlaw@hpe.com

Web site: www.ieee802.org/3

Current IEEE 802.3 activities

IEEE 802.3 Task Forces

IEEE P802.3cw 400 Gb/s over DWDM systems

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement

IEEE P802.3df 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet

IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs

IEEE P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision)

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

IEEE 802.3 Ad Hoc

IEEE 802.3 New Ethernet Applications

IEEE 802.3 Power Distribution Coordinating Committee (PDCC)

IEEE 802.3 Call for Interest

IEEE 802.3 Ethernet for Automotive Imaging Sensors

IEEE 802.3 Maintenance

Description

Maintenance of the IEEE 802.3 standards are performed by the IEEE 802.3 Maintenance Task Force.

Plan

Consider new maintenance requests

Review status of outstanding maintenance requests

Consider any other maintenance business

Web page

http://www.ieee802.org/3/maint/index.html

IEEE P802.3cw 400 Gb/s over DWDM Systems Task Force

Description

Define physical layer specifications and management parameters for the transfer of Ethernet format frames at 400 Gb/s at reaches greater than 10 km over DWDM systems.

Web site: http://ieee802.org/3/cw/index.html

Status

Second Working Group recirculation ballot of draft D2.2 initiated on 24 June 2023 Second Working Group recirculation ballot to end before plenary session

Meeting Plan

Meet jointly with IEEE P802.3df and IEEE P802.3dj Task Forces during plenary session Consideration of OIF 800LR IA Project update liaison letter

Second Working Group recirculation ballot comment resolution planned after plenary session Weeks of 24 July 2023 and 31 July 2023

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force

Description

Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery supporting multiple powered devices on the 10 Mb/s mixing segment.

Web site: http://ieee802.org/3/da/index.html

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

Consideration of proposed updates to project objectives

IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet Task Force

Description

Define Ethernet MAC parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 800 Gb/s over copper, multi-mode fiber, and single-mode fiber physical medium dependent (PMD) sublayers based on 100 Gb/s per lane signaling technology. Using these new definitions for 800 Gb/s, define physical layer specifications and management parameters for the transfer of Ethernet format frames at 400 Gb/s.

Web site: http://ieee802.org/3/df/index.html

Status

First Working Group recirculation ballot of draft D2.1 initiated on Friday 9 June 2023 First Working Group recirculation ballot to end before plenary session

Meeting plan

Meet jointly with IEEE P802.3cw and IEEE P802.3dj Task Forces during plenary session Start first Working Group recirculation ballot comment resolution

Comment resolution planned to continue during week of 17 July 2023 after plenary session

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet Task Force

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add 100 Mb/s Physical Layer specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors

Web site: https://ieee802.org/3/dg/index.html

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber Task Force

Description

Specify additions to and appropriate modifications of IEEE Std 802.3 to add Physical Layer specifications and management parameters for multi-gigabit optical Ethernet using graded-index plastic optical fiber for application in the automotive environment.

Web site: https://ieee802.org/3/dh/index.html

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force

Description

Define Ethernet MAC parameters for 1.6 Tb/s. Define physical layer specifications, and management parameters for the transfer of Ethernet format frames at 800 Gb/s and 1.6 Tb/s over copper and single-mode fiber physical medium dependent (PMD) sublayers based on 200 Gb/s or greater per lane signaling technologies. Using these new definitions for 800 Gb/s and 1.6 Tb/s, define physical layer specifications and management parameters for the transfer of Ethernet format frames at 200 Gb/s and 400 Gb/s, when applicable.

Web site: https://ieee802.org/3/dj/index.html

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Meet jointly with IEEE P802.3cw and IEEE P802.3df Task Forces during plenary session Continue to work on selection of a set of baseline proposals

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs Task Force

Description

Define physical layer specifications and management parameters for symmetric bidirectional operation at greater than 50 Gb/s over a single strand of single mode fiber of at least 10 km.

Web site: https://ieee802.org/3/dk/index.html

Status

Selecting set of baseline proposals to satisfy project objectives

Meeting plan

Continue to work on selection of a set of baseline proposals

IEEE P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision)

Description

This revision is to address accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.1 Structure of Management Information version 2 (SMIv2) MIB modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.1 was last revised in 2013.

Web site: https://ieee802.org/3/1/b/index.html

Status

PAR approved 30 Mar 2023

Meeting plan

Start to work on selection of a set of baseline proposals

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision)

Description

This revision is to addresses accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.2 YANG modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.2 was first published.

Web site: https://ieee802.org/3/2/a/index.html

Status

PAR approved 30 Mar 2023

Meeting plan

Start to work on selection of a set of baseline proposals

Ethernet for Automotive Imaging Sensors call for interest

This is a call for interest to initiate a Study Group to develop a PAR and CSD for an electrical Ethernet physical layer and associated interface client specifications optimized for automotive imaging sensors. We believe there is a timely market opportunity for the introduction of such specialized interfaces now as the number of cameras per vehicle grows rapidly. The target automotive cameras stream multigigabit-speed data from the sensor and have low-utilization, intermittent control data in the other direction over the Ethernet link. While transmit and receive traffic flows are independent in traditional Ethernet, these new physical layers may benefit from additional control between the MAC and the PHY, e.g., at the Reconciliation Sublayer, to optimize the MAC/PHY interfacing and PHY power/complexity. These new physical layer applications operate under very tight power and cost/complexity constraints, creating the opportunity for new or modified IEEE 802.3 standards to better serve the application.

The call for interest will take place during the IEEE 802.3 Opening Plenary on the morning of Monday 10 July 2023. A call for interest consensus building meeting has been scheduled to occur from 19:30 to 21:00 CEST (17:30 to 19:00 UTC) on the evening of Tuesday 11 July 2023. The vote to determine if a Study Group will be formed will take place at the IEEE 802.3 Closing Plenary on the afternoon of Thursday 13 July 2023.

IEEE 802.3 New Ethernet Applications (NEA) Ad Hoc

Description

The goal of this activity is to assess requirements for new Ethernet-based applications, identify gaps not currently addressed by IEEE 802.3 standards, and facilitate building industry consensus towards proposals to initiate new standards development efforts

Web site: http://ieee802.org/3/ad_hoc/ngrates/index.html

Status

Two-year extension approved on 12 October 2022

Meeting plan

One consensus building meeting for Ethernet for Automotive Imaging Sensors call for interest

IEEE 802.3 Power Distribution Coordinating Committee (PDCC) Ad Hoc

Description

Review output and build consensus on draft input for liaisons regarding power delivery over cabling cited in IEEE 802.3 standards and projects, e.g.:

Build consensus on responses to public input proposals received as part of the next edition of NFPA70; and consider any other NFPA related items of interest, such as proposed Tentative Interim Amendments (TIA)

Build consensus on draft input to IEC TC64/PT716, and proposed direction of the IEEE 802.3 Category C liaison expert

Build consensus on draft input to IEC TC108/PT63315, and proposed direction of the IEEE 802.3 Category C liaison expert

Web site: https://ieee802.org/3/ad_hoc/PDCC/index.html

Meeting plan

Review of comment received during the FDIS ballot of IEC 60364-7-716

IEEE 802.3 Officers, Subgroup Chairs and Vice-Chairs

```
IEEE 802.3 Chair: David Law <dlaw@hpe.com>
```

IEEE 802.3 Vice Chair: Adam Healey <adam.healey@broadcom.com>

IEEE 802.3 Secretary: Jon Lewis <jon.lewis@dell.com>

IEEE 802.3 Executive Secretary: Steve Carlson <scarlson@ieee.org>

IEEE 802.3 Treasurer: Valerie Maguire <vmaguire@ieee.org>

IEEE 802.3 Task Force chairs

IEEE P802.3cw 400 Gb/s over DWDM systems: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet: Steve Carlson <scarlson@ieee.org>

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement: Chad Jones <cmjones@cisco.com>

IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet: George Zimmerman <george@cmephyconsulting.com>

IEEE P802.3dh Multi-Gigabit Automotive Ethernet over Plastic Optical Fiber: Yuji Watanabe <yuji.watanabe@agc.com>

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: John D'Ambrosia <jdambrosia@ieee.org>

IEEE P802.3dk Greater than 50 Gb/s Bidirectional Optical Access PHYs: Yuanqiu Luo <yuanqiu.luo@futurewei.com>

IEEE P802.3.1 (IEEE 802.3.1b) SMIv2 Data Models (Revision) Marek Hajduczenia <mxhajduczenia@gmail.com>

IEEE P802.3.2 (IEEE 802.3.2a) YANG Data Model (Revision) Marek Hajduczenia <mxhajduczenia@gmail.com>

IEEE 802.3 Task Force vice-chairs

IEEE P802.3cw 400 Gb/s over DWDM systems: Tom Issenhuth <tissenhuth@outlook.com>

IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet: Natalie Wienckowski <nwienckowski@msn.com>

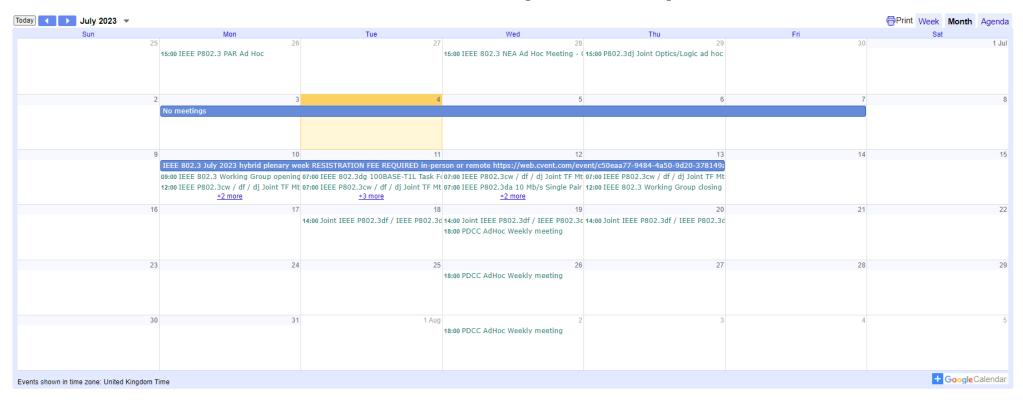
IEEE P802.3df 400 Gb/s and 800 Gb/s Ethernet: Mark Nowell <mnowell@cisco.com>

IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet: Mark Nowell <mnowell@cisco.com>

Upcoming meetings

Please see http://www.ieee802.org/3/calendar.html for latest calendar of meetings

NOTE: Calendar set to detected computer time zone: Europe/London



If the calendar above does not display, please try the alternate calendar view which will always display in UTC.

To subscribe to this calendar in your personal logged-in Google account calendar, use the "+ Google Calendar" button in the lower right corner of the calendar view above.

To subscribe to this calendar using other calendar applications use this <u>iCalendar subscription link URL</u>.

As an example, for Outlook follow these instructions using the above iCalendar subscription link URL as the address of the internet calendar to add to Outlook.