



IEEE 802 “*Network Enhancements for the Next Decade*”

Industry Connections Activity (Nendica): Overview

Roger Marks (Huawei)

roger@ethair.net

+1 802 capable

3 July 2020

Nendica Overview

About IEEE 802 Network Enhancements for the Next Decade Industry Connections (IC) Program

The goal of this activity is to assess, outside of the IMT activity, emerging requirements for IEEE 802 wireless and higher-layer communication infrastructures, identify commonalities, gaps, and trends not currently addressed by IEEE 802 standards and projects, and facilitate building industry consensus towards proposals to initiate new standards development efforts. Encouraged topics include enhancements of IEEE 802 communication networks and vertical networks as well as enhanced cooperative functionality among existing IEEE standards in support of network integration. Findings related to existing IEEE 802 standards and projects are forwarded to the responsible working groups for further considerations.

Project activities and deliverables

There will be two deliverables:

- Records of the meetings, including minutes and supporting presentations.
- A set of reports documenting the findings of the IC activity, with recommendations regarding new standardization topics, documentation of use cases and user needs for those topics, and proposed organizational approaches to ensure effective participation from user communities

Stakeholders - Who should join

Stakeholders identified to date include but are not limited to: users and producers of systems and components for networking systems, data center networks, high performance computing, cloud computing, telecommunications carriers, automotive, intelligent transport systems, eHealth, smart cities, smart buildings, Internet of Things (IoT), factory automation, and industrial applications. External standardization bodies and industry organizations, such as the Internet Engineering Task Force (IETF), North American Network Operators Group (NANOG), and Telecommunications Industry Association (TIA), have been engaged with Nendica activities and will be encouraged to participate in enhanced cooperation.

Nendica Leadership

- Nendica Chair
 - Roger Marks
- Current/Prior Report editors
 - Paul Congdon, Liang Guo, Roger Marks, Nader Zein
- IEEE 802.1 Chair
 - Glenn Parsons

Nendica Overview

- Voting
 - While operating as a subgroup under IEEE 802.1, any person attending a meeting may vote on all motions (including recommending approval of the deliverables). A vote is carried by 75% of those present and voting Approve or Disapprove.
- Attendance
 - log: IMAT, under 802.1 <<https://imat.ieee.org>>
 - “reciprocal” attendance policy is per home WG
- Nendica Activity Authorization
 - Until March 2021 (**ICAID IC17-001-02**)
- Document storage – 802.1 website & mentor
 - <http://1.ieee802.org/802-nend/>
 - https://mentor.ieee.org/802.1/documents?is_group=ICne
- Mailing List
 - STDS-802-NEND@LISTSERV.IEEE.ORG
 - Archive: <https://listserv.ieee.org/cgi-bin/wa?Ao=STDS-802-NEND>
 - Join: <http://listserv.ieee.org/cgi-bin/wa?SUBED1=STDS-802-NEND&A=1>

Nendica Status (1 / 3)

- Flexible Factory IoT [FFIoT]
 - Completed comment resolution and voting approval
 - Published 2020-04-17
 - IEEE 802 Nendica Report: Flexible Factory IoT — Use Cases and Communication Requirements for Wired and Wireless Bridged Networks (ISBN 978-1-5044-6229-7)
 - Editor: Nader Zein
 - Further comments welcome:
 - <https://1.ieee802.org/nendica-ffiot/>

Nendica Status (2/3)

- Data Center Networks [DCN]
 - Work Item initiated 2020-03
 - Developing revision of
 - IEEE 802 Nendica Report: The Lossless Network for Data Centers (ISBN 978-1-5044-5102-4)
 - Editors: Paul Congdon and Liang Guo
 - Drafts and contributions posted:
 - <https://1.ieee802.org/nendica-dcn/>
 - Generally meeting alternate Thursdays (09:00 ET)

Nendica Status (3/3)

- Stream and Flow Interworking [SFI]
 - Work Item initiated 2020-03
 - Editor: Roger Marks
 - Drafts and contributions posted:
 - <https://1.ieee802.org/nendica-sfi/>
 - Generally meeting alternate Thursdays (09:00 ET)