Mentor DCN 802.1-21-0069-00-ICne

Nendica Session Issues, 2021-11

Roger Marks (EthAirNet Associates; Huawei) <u>roger@ethair.net</u>

+1 802 capable

11 November 2021

Nendica "Motivation and Goal"

• ICAID, Sept 2021 – Sept 2023

- The goal of this activity is to document emerging requirements and directions for IEEE 802 networks, 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. Topics concerning higher-layer applications related to new standards development in the IEEE 802.1 Working Group are also specifically expected and encouraged. Findings related to existing IEEE 802 standards and projects are forwarded to the responsible working groups for further considerations.
- https://standards.ieee.org/content/dam/ieee-standards/standards/web/governance/iccom/IC17-001-IE.pdf

Nendica Overview

- Web site
 - https://1.ieee802.org/802-nendica/
- Voting
 - organized under 802.1 WG
 - no members; anyone attending may vote on all motions
- Document storage –mentor
 - <u>https://mentor.ieee.org/802.1/documents?is_group=ICne</u>
- Mailing List
 - STDS-802-NEND@LISTSERV.IEEE.ORG
- Organization
 - Work Items to develop Nendica Reports for publication
 - Study Items for less formal activity, or for proposing a Work Item

Nendica Meetings

• Have been meeting Thursdays (09:00-11:00 ET)

Date	Attendance	Date	Attendance
2021-11-11		2021-09-09	17
2021-11-04	17	2021-09-02	12
2021-10-28	15	2021-08-26	19
2021-10-21	14	2021-08-19	10
2021-10-14	14	2021-08-12	14
2021-10-07	15	2021-08-05	23
2021-09-30	25	2021-07-29	11
2021-09-23	33	2021-07-22	13
2021-09-16	20	2021-07-15	34

"802.1 Topics" in Nendica

- ICAID says "Topics concerning higher-layer applications related to new standards development in the IEEE 802.1 Working Group are also specifically expected and encouraged."
- on July 20, 2021, the IEEE 802.1 WG Chair notified the 802.1 WG Opening Plenary Meeting of:
 - "Migration towards vetting all new work in Nendica"
 - "Strong proposals can be directed to the TG/WG to initiate a PAR; Proposals needing more consensus can be further developed."
- Current Nendica approach to "802.1 Topics":
 - Topics come to Nendica from individuals (not formally "referred" by WG)
 - Nendica may report to WG or TG that it has completed vetting on a topic and anticipates that further progress should be considered in WG or TG

Current/Recent Nendica Activity

- Study Item: "Cut-Through Forwarding in Bridges and Bridged Networks"
 - 2021-09-16: "Nendica consensus is that further discussion should be brought to the 802.1 WG or a Task Group."
- Study Item: "Evolved Link Layer Architecture [ELLA]"
- "802.1 Topics"
 - PFC Headroom (completed)
 - 2021-09-16: "Nendica consensus is that further discussion should be brought to the 802.1 WG or a Task Group based on the PAR description in 802.1-21-0052 (rev 00 or newer)."
 - Pulsed Queuing and Multi-CQF
 - Source (Remote) PFC

Nendica Meeting 2021-11-11

- Agenda
 - <u>https://1.ieee802.org/802-nendica-agenda-2021-11-11/</u>
- Update
 - News on 802.1 Technical Plenary
- Admin
 - Possible motion "to request meeting authorization on the same terms agreed 2021-07-20"
- CTF Study Item
 - discussion
- ELLA Study Item
 - Possible motion to authorize PAR development on IEEE Std 802 revision
- Pulsed Queuing and Multi-CQF
 - revised description document and preliminary PAR text
- Source (Remote) PFC update

802.1 Technical Plenary

• Announced by 802.1 WG Chair, 2021-10-29

- The 802.1 Working Group is responsible for the 802 Architecture and interworking between 802 technologies.
- The 802.1 Technical Plenary is a vehicle for addressing specific technical problems across all 802. It is chaired by the 802.1 WG chair and is convened when there are specific topics identified.
- <u>https://1.ieee802.org/technical-plenary</u>
- First meeting: 2021-12-02, 16:00-18:00 ET
 - This is the first in a series to kick off a wider discussion on the 802 Overview & Architecture.
 - This series of meetings would:
 - Provide wider awareness for the need to revise IEEE Std 802
 - Provide an opportunity to discuss the content notably should it be the same or should it add more architecture
 - Provide examples of the current 802 architecture (i.e., spread around in 802, .1Q, .1AC, .3, .11, .15.x, ...)
 - Identify gaps in the current architecture
 - In addition, this would provide the opportunity to discuss technical points across all WGs, for example:
 - *MAC service interface (and its support of 802 MAC/PHYs)*
 - 48 and 64 bit bridging
 - *Protocol IDs and their encoding Length/Type and LLC*
 - Attendance is open to all 802 WG participants. WG chairs are invited to identify at least one voting member to attend.
 - Topics for discussion can be proposed to the 802.1 WG chair. The agenda and topics for this meeting will be posted 14 days in advance.