

Proposals for CTF Ad Hoc Progress

Roger Marks
(EthAirNet Associates; Huawei)
roger@ethair.net

+1 802 capable

2022-03-23

Background

- Nendica Study Item: [Cut-Through Forwarding in Bridges and Bridged Networks \[CTF\]](#) active since 2021-03-11
- Organized IEEE 802 Plenary Tutorial (2021-07-07): “Cut-Through Forwarding (CTF) among Ethernet networks”
- Nendica Consensus (2021-09-16) that “further discussion should be brought to the 802.1 WG or a Task Group”
- 802.1 WG submitted draft PAR 802.1DU (“Cut-Through Forwarding Bridges and Bridged Networks”) [PAR](#) and [CSD](#), 2022-01-31 for IEEE 802 March Plenary
- Comments developed in 802.3 WG, with 802.3 and 802.1 members
- Comment responses developed in 802.1 WG, with 802.1 and 802.3 members
- 802.1 WG decided not to pursue PAR in March

802.1 WG Motions

- 802.1 WG Motions, 2022-03-15:
 - *Authorize the 802.1 WG to hold joint meetings with the 802.3 WG to discuss cut-through forwarding.*
 - *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.*
 - *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.*

802.1 WG Actions

- 802.3 Closing Plenary
 - 802.1 WG Chair presentation recounted history of CTF activity in 802 back to 2016 and reported:
 - *P802.1DU PAR is deferred...*
 - *Consensus in 802.1 WG to discuss further with 802.3 WG jointly*
 - *Proposed venue*
 - *Joint NEA and Nendica Industry Connections ad hoc*
 - Note: “NEA” is IEEE 802.3 Industry Connections New Ethernet Applications Ad Hoc
 - https://www.ieee802.org/3/ad_hoc/ngrates
 - 802.3 Chair verbally accepted the proposal, with details to be determined
 - Note: Nendica Chair reached out to NEA Chair, March 17

Nendica Chair to NEA Chair

- ...
- *The 802.1 WG agreed to joint meetings with the 802.3 WG to discuss cut-through forwarding (CTF). Glenn reported that at the 802.3 Closing Plenary today, proposing a joint NEA/Nendica CTF activity, as Glenn and David had previously discussed. It's my understanding that David gave the go-ahead at the 802.3 Closing Plenary, but correct me if I am wrong.*
- *With that understanding, it seems we are on the hook to try for consensus on bridging the gaps, or at least to improve the level of shared understanding, on the CTF issue.*
- *I think there are many logistical and scheduling points to arrange, and perhaps we should think about how to get that discussion started.*
- *For the moment, I want to let you know that Nendica meets Thursdays 09:00-11:00 ET. For the agenda of March 24, I've scheduled time to review what happened during the 802 Plenary, including on the CTF points, and to discuss how to proceed. Note the Nendica can also hold additional ad hoc meetings, including in other time slots, and I think that Nendica/NEA meetings should be limited to CTF-only so that other topics don't bore the participants.*
- *You (and anyone) are welcome to join the Nendica discussions next week. If you would like to coordinate on a joint contribution on how the process might work, I'm happy to work with you. If not, I'll probably make such a contribution on my own; you are, of course, welcome to make one too. Before too long, I hope we can get the joint activity rolling.*
- *I'm looking forward to your thoughts, again understanding that you may be tied up with secretarial work.*

Issues for Next Steps

- Goals of the joint ac hoc
 - expected output
- Meeting schedule
 - periodicity
 - start times
 - duration
- Meeting logistics
 - document storage area
 - chair
 - agenda setting
 - Minutes
 - conference facility, calendar, IMAT

Next Step Proposal: Goals

- Goals of the joint ad hoc
 - expected output:
 - document consensus, or alternative positions, for consideration of WGs
 - topics
 - list relevant standards
 - summarize requirements, from standards, for frame error checking by the entities
 - summarize understanding of service interfaces and the meaning and implications of atomicity in primitives
 - summarize any inconsistency of MAC and higher-layer standards with a CTF standard
 - options for standardization
 - P802.1DU alone
 - issues that 802.3 WG could consider as a companion project

Next Step Proposal: schedule

- Periodicity
 - one week? two weeks>
 - e.g. (if two weeks, Thursday): April 7, April 21, May 5
 - three meetings before interim sessions
 - 802.1 Interim is May 9–13
 - 802.3 Interim is May 16–26
 - can reassess schedule during Interims
- day/time
 - at the convenience of those interested
 - run a poll (advertised to Nendica and NEA)
- duration
 - allow two hours per meeting

Next Step Proposal: logistics

- document storage area
 - Nendica mentor
- Chair
 - Alternating between Nendica and NEA Chairs
- conference facility
 - Nendica Webex
- calendar and IMAT
 - per Nendica; calendar entry duplicated in 802.3
- agenda setting
 - provided on the Nendica web site
 - provided by the alternating Chair
- Minutes
 - Provided by the group not chairing

Schedule to finishing planning

- develop means to engage NEA participants
- by 2022-03-31 Nendica should:
 - agree on a goal
 - determine logistics
 - schedule the full set of meetings
 - post first meeting agenda
- Further meetings will be within the joint ad hoc, not within Nendica