

IEEE 802 Tutorial follow up: Cut-Through Forwarding (CTF)

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IEEE 802 Plenary Tutorial: Brief Recap. (1)

Upfront

- See <https://mentor.ieee.org/802.1/dcn/21/1-21-0037-00-ICne-ieee-802-tutorial-cut-through-forwarding-ctf-among-ethernet-networks.pdf> for details.
- **This is a summary - proposed for technical discussion in subsequent meetings, not today's administrative meeting.**

Markets, so far

- Industrial Automation
- Professional Audio/Video
- Data Center Networks

IEEE 802 Plenary Tutorial: Brief Recap. (2)

802.1 Considerations

- Specific Stds proposal: Dedicated base 802.1 Standard
 - Network Aspects
 - Bridge Operation
- Straight forward to me, at least on the higher layers

802.3 Considerations

- Open questions
 - Proper interpretation of IEEE Std 802.3 (e.g., Model vs. Implementation/MAC Service Interface)
 - Invalid MAC frame handling (appear to only affect the optional MAC control sublayer)
 - Minimum frame size

Open technical issues

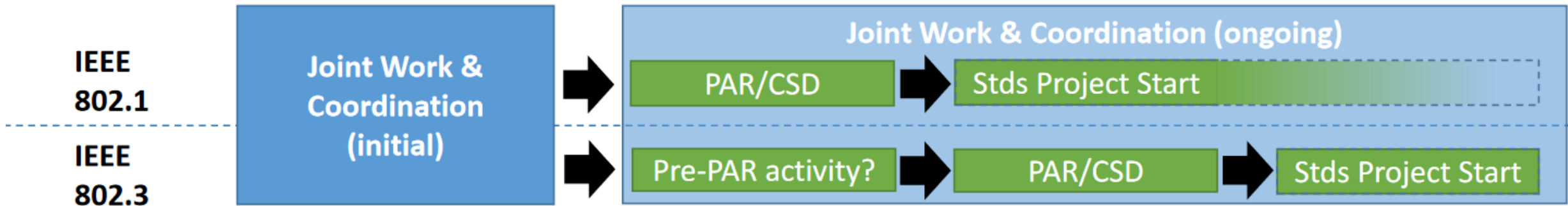
- Questions on the lower layers for IEEE 802.3 WG, but partially affecting IEEE 802.1 WG, too.
- **Today's motivation: Best results are expected if both WGs work together!**

Administrative Discussion

IEEE 802.1 and IEEE 802.3 joint pre-PAR activities

From the Tutorial

Moving Forward Proposal



Joint work & coordination

- CTF needs the expertise of two IEEE 802 WGs.
- It appears vital to have some level of joint work & coordination on technical aspects and logistics (interfaces, meetings, etc.).
- A possible forum for initial joint work & coordination: IEEE 802 Nendica.

Administrative discussion (separate meeting)

- Topics
 - Which pre-standards activities can and should be done in a (significant) initial joint work & coordination phase?
 - What are the logistics?
 - ...
- Meeting identified to plan followup: IEEE 802 Nendica weekly call schedule for **August 5, 2021 09:00-11:00 ET (tentatively)**, pending **finalization on July 20, 2021**.

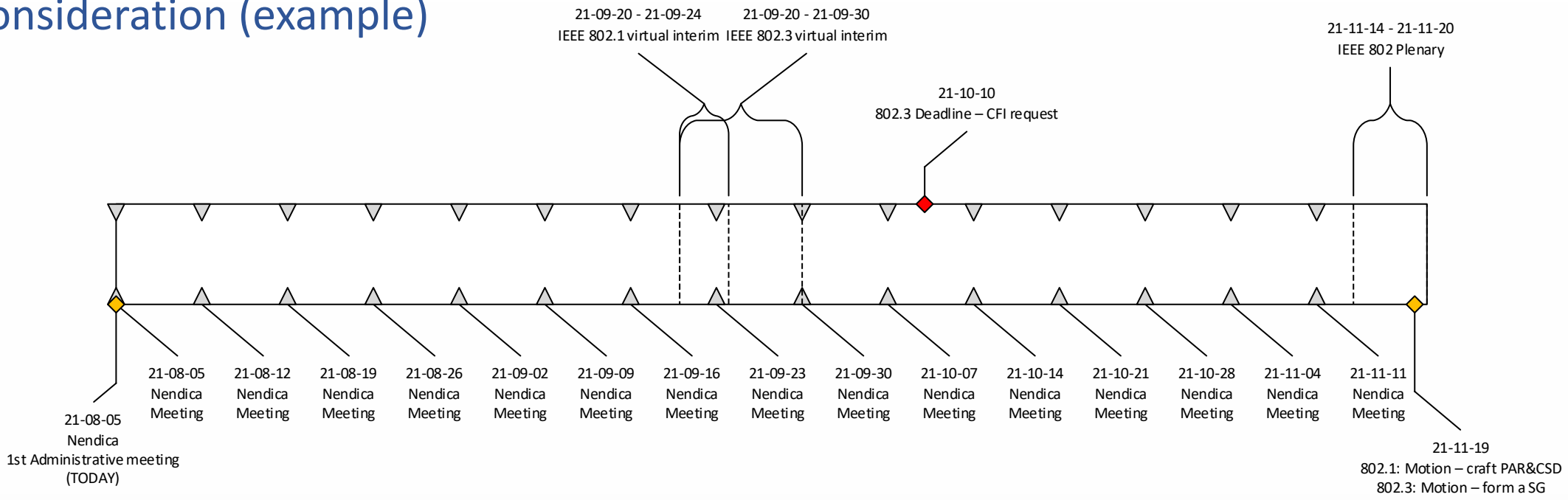
➔ ***If you are interested in this discussion you are very welcome!***

Review: Regular procedures of both WGs

Procedural aspects/differences – kicking off individual Stds activities (to my knowledge)

- IEEE WG 802.1
 - The motion to craft PAR/CSD **indicates interest** of the group
- IEEE WG 802.3
 - A call for interest (CFI) to form a study group **indicates interest** of the group
 - The motion to craft PAR/CSD **indicates interest** of the group

Time consideration (example)



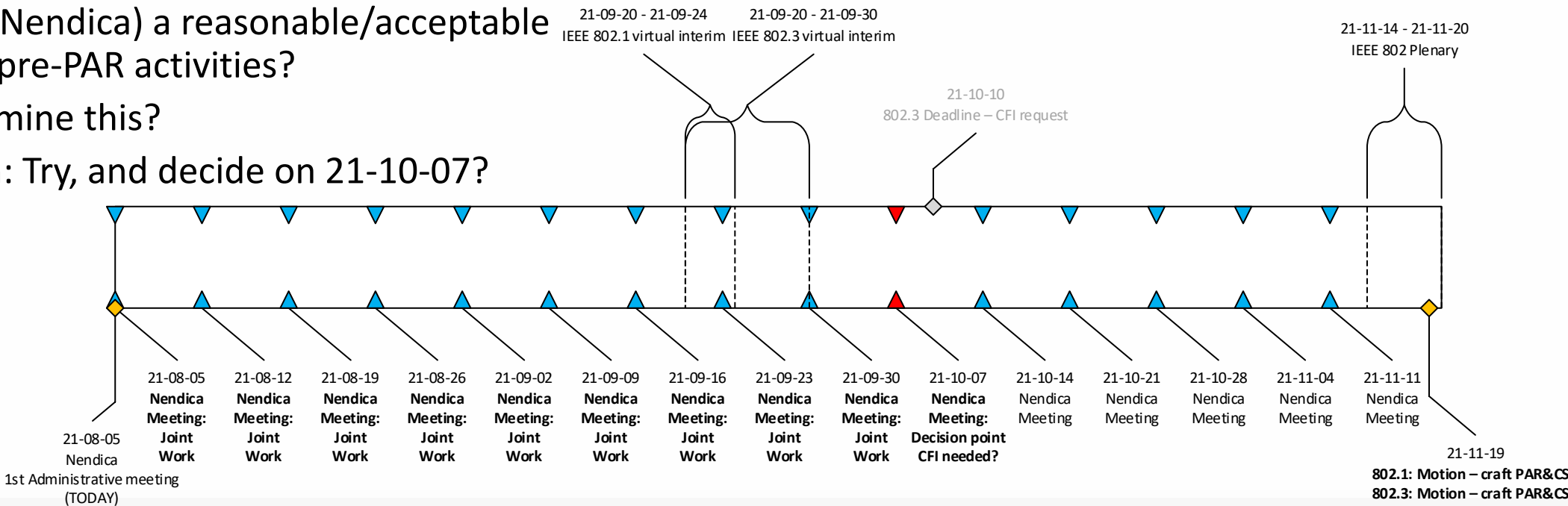
Inter-WG Activities

Again: Joint technical pre-PAR work expected to yield the best results

- Technical clarifications
 - Proper interpretation of IEEE Std 802.3
 - Relationship across IEEE Std 802.3 and IEEE Std 802.1AC/802.1Q
- What needs to be done in IEEE Std 802.3

Questions/Discussion

1. Is joint work (Nendica) a reasonable/acceptable approach for pre-PAR activities?
2. How to determine this?
3. Hybrid option: Try, and decide on 21-10-07?



Subsequent Joint Meetings on CTF

Opportunities

- IEEE 802 Plenary Meetings
- Regular Web-based Meetings

Proposal (Regular web-based meetings)

- 1h/week
- 1st half of regular Nendica Meetings: Thursdays, 9:00am – 10:00am ET/13:00 – 14:00 UTC
- Option: Re-schedule the time slot with 10 days notice in advance (Nendica Ad-Hoc)

Questions/Discussion

1. 1h/week appropriate?
2. Start according to the proposal, or re-schedule now?
3. Next date to meet again?

Calendar Links

- IEEE 802.3: <https://www.ieee802.org/3/calendar.html>
- IEEE 802.1: <https://1.ieee802.org/wg-calendar/>
- IEEE 802 Nendica: <https://1.ieee802.org/wp-content/uploads/2021/03/cal-nendica.html>

Thank you for your Attention!

Questions, Opinions, Ideas?

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