

Unresolved Comments 60802 Draft 2.3

April 2024

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Overview

- There are 5 remaining unresolved comments:
 - Editorial – 29
 - Technical – 1, 2, 3, and 7
- In addition, the following editorial comments have been resolved by the editor:
 - 27, 28, 32, 13, 12, 14, 17, 11, 33, 19, 20, 21.
- Finally, 1 rogue editorial comment (comment 34) asking that IEEE Draft Std P802.1ASdn be added to the normative references has been entered and resolved by the editor.

Comment 3

- Comment 3
 - Comment: Refer to comment 569 on D2.1 ballot
- Comment 569 from the D2.1 Ballot
 - Comment: The reference to IEEE 802.1AR 9.2 leads to NIST 186-5 but the clause in Annex D is not defined.
 - Suggested Remedy: Check for a correct reference as this one makes no sense.
 - Response: ACCEPT IN PRINCIPLE. Change the text on line 2202 to read: "An IDevID shall utilize the signature suite: ECDSA P-256/SHA-256 according to IEEE Std 802.1AR"
 - The reference in 802.1AR actually leads to NIST 186-4, not 186-5. In that context, the reference makes sense. While this might be confusing, it would be equally, if not more, confusing to refer to a document which isn't referenced in 802.1AR. By using a non-dated reference, per IEC guidelines, the reader is referred to the most recent edition of the standard. It is assumed that 802.1AR will at some point be updated to reflect this change. In the meanwhile, the documents referenced in 802.1AR are still publically available.

Comment 1

- Comment 1

- Comment: Refer to comment 501 and 502 on D2.1 ballot
- Suggested Remedy: The Phrase under discussion was changed - as the Tick Granularity is 10 ns, the phrase "TickGranularity of less than or equal to 10 ns according to IEEE Std 802.1Q-2022, 8.6.9.4.16 and Table 12-32." is not correct as TickGranularity is in 10 ns. During the discussion of the comment it was pointed out, that item 2) of the list (which includes item 1) has a definition problem of error budget both for the timing points and the PHY which is unclear. IEEE 802.1Q states in 12.29.2 that the timing point refers to the gate open/close which is controlled by the tick granularity and defines the delay between the two mentioned timing points which has a variance (is this variance of the delay the error budget?). With this definitions given the second item includes the first item from a general point of view as the Tick Granularity is coupled with the timing point.

- Comment 501 from the D2.1 Ballot

- Comment: The tick model is an abstract model which assumes a correlation to the exact time implementation may use MII send clock as trigger that provides a good trigger source but has a granularity of 40 ns.
- Suggested Remedy: Change the requirement that the send time error caused by additional means beyond the send timing of the PHY is equal or less than 10 ns. Change this also in ccA list.
- Response: ACCEPT IN PRINCIPLE. Change item 1) to read: TickGranularity of less than or equal to 10 ns according to IEEE Std 802.1Q-2022, 8.6.9.4.16 and Table 12-32. With this change the statement no longer refers to an abstract model.

Comment 2

- Comment 1

- Comment: Refer to comment 504 on D2.1 ballot
- Suggested Remedy: The comment response is not correct as the statement in this line do not reference to a timestamp error but to a timing points for transmission selection. This occurs only at the beginning of the sending after a gate open event. Thus, it is on the same level as sync accuracy and precision. It is comparable with time sync error but very low and hard to achieve. To increase this time to 100 ns will not have an significant impact on the accuracy but would allow useful interfaces between components in a modular design. E.g. the clock pulse of a PHY must not be expressed as an element of the PHY error budget but can be handled as interface signaling variance.

- Comment 504 from the D2.1 Ballot

- Comment: This requirement should state that this is not an absolute error but is relative to the local clock with an error budget of 1 μ s. Thus, a 10 ns requirement is questionable in regards to the overall error budget.
- Suggested Remedy: The error should be seen in relation to the time error. The error itself is a matter of loss of bandwidth. Thus, 40 -100 ns seems to be more than acceptable. It may be acceptable for some applications to have higher values without significant impact. Correct also in ccB list.
- Response: REJECT. This is a measure of timestamp error. It is relative to the bridge or end station. The 1 us budget is for a 100 hop network, not a single PTP instance..

Comment 1- cont.

- Comment 502 from the D2.1 Ballot
 - Comment: 5.8.3 Line 1626 specify a more stringent requirement and thus, this requirement shall be skipped.
 - Suggested Remedy: Delete requirement. Remove this also in ccA list.
 - Response: REJECT. These requirements refer to 2 different things.

Thank you