Status of Next 802.1ASdm Draft (D0.4)

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Introduction - 1

❑ This presentation summarizes the status of the next draft of 802.1ASdm, after D0.3

❑ The next draft is D0.4

- D0.4 has been uploaded as of the preparation of the current presentation (see https://www.ieee802.org/1/files/private/asdm-drafts/d0/802-1ASdm-d0-4.pdf)

- D0.4 addresses all comments against D0.3

  - Several outstanding comments against D0.2, relating to the MIB and to formatting improvements for several figures, are still outstanding (see Annex Z)

❑ Clause 17 specifies hot standby, and is a new clause for 802.1ASdm, i.e., it is not present in 802.1AS-2020

- The editing instruction for Clause 17 is to simply add the clause; as a result, there are no *change* instructions in Clause 17

- Therefore, there are no editing instructions that use track changes in Clause 17; therefore, since Clause 17 contains many changes relative to D0.3, track changes have been used to indicate the changes relative to D0.3 (for the convenience of the reader)

Introduction - 2

❑Since Clause 17 of D0.4 contains track changes relative to D0.3 (this is in addition to change bars), D0.4 will ***not*** be the next balloted version.

❑Instead, a D0.5 will be created, which will be the same as D0.4, except:

  ▪All track changes in Clause 17 will be accepted

  ▪The revision history in Annex Z will be updated to reflect D0.5

  ▪A pdf table of contents in the right margin, accidentally not generated in D.04, will be included

  ▪D0.5 will be balloted

❑D0.5 will not be updated to reflect any comments or discussion in the current meeting

  ▪Instead, those who have comments are encouraged to submit them with their ballots for D0.5

  ▪It is felt that this approach will be more efficient than delaying the start of the ballot to incorporate comments given verbally in the current meeting

❑The following slides summarize some of the more major changes in D0.4 (relative to D0.3), plus several questions

Summary of Major Changes in D0.4 -- 1

- Inclusion of Maintenance Items 334 (see 10.2.9.2.1) and 335 (see 10.2.10)

- Addition of managed object for gmPresent (needed for 60802)

- Addition of an Assumptions clause (17.2) for Hot Standby

- Replacement of HotStandbyClockSource and HotStandbyClockTarget by ClockSource and ClockTarget, respectively, in Clause 17

- Removal in Clause 17 of references to Clause 9 Interface Primitives

- For HotStandbyInstance state machine, change of the names of the SYNC_TIMEOUT and NOT_SYNCED states to NOT_SYNCED and INITIALIZING, respectively

- Removal of variables that are not used from the HotStandbyInstance and HotStandbySystem state machines

- Modification of isSynced() to return TRUE if the PTP Instance is a GM

Summary of Major Changes in D0.4 -- 2

❑Reorganization of certain subclauses of 17.6.3, to include conditions that were previously left out.

❑ Addition of a subclause to 17.6.3.3.2 (it is 17.6.3.3.2.2) to describe split functionality, based on approach in https://www.ieee802.org/1/files/public/docs2021/dm-Rodrigues-LV-Hot-Standby-0821-v00.pdf (which in turn is based on https://www.ieee802.org/1/files/public/docs2020/dm-cummings-as-4-domains-0320-v04.pdf)

- An interworking function (IWF) is added to the HotStandbySystem entity

- If the slave port of the secondary PTP Instance has failed, the IWF copies the most recent PortSyncSync structure at the primary PTP Instance SiteSync entity to the secondary PTP Instance SiteSync entity

  - The IWF translates only the domainNumber and the localPortNumber (the latter, i.e., translation of the localPortNumber, is necessary so that the secondary PTP Instance state machines will work properly).

Summary of Major Changes in D0.4 -- 3

❑Addition of split functionality (Cont.)

▪The split functionality feature specifies only transfer from primary to secondary when the primary slave port has failed

•It does not specify transfer from secondary to primary if the primary slave port has failed.

•The reason for this is that, if both transfers were allowed, there could be a situation where a timing loop would be created (e.g., if a primary PTP Instance slave port in one time-awaresystem failed and a secondary PTP Instance slave port in another time-aware system failed.

•In addition, as discussed previously, there is no transfer of information from a passive port if a slave port has failed.

❑In addition to the above, there are many other, more minor, changes in D0.4, to address all the comments against D0.3

Questions

❑ The split functionality and, in general, the transfer of information from the primary and to the secondary PTP Instance do not address the transfer of time properties information (e.g., offsetFromMaster, leap59, leap61, etc.), nor of ClockQuality information).

- ▪ Should this be considered?
  - • For that matter, the transfer of time properties and ClockQuality information from the ClockSource to the ClockMaster, either in Clause 17 or Clause 9, is not considered.)
- ▪ See Z.1.4.1 c) and the editor's note at the end of 17.6.3.3.2.2.

❑ See also Z.1.4.1 a), b), and d), and various editor's notes for items for which comments or contributions are requested

Thank you