

# Comment #84 of IEEE Draft P802.1ASdm/D0.2

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# Comment #84

The Clause 17.12 State requirements have several sub-clauses, 17.12.1 Primary grandmaster, 17.12.2 Secondary grandmaster in REDUNDANT state, 17.12.3 Slave and 17.12.4 HOLDOVER.

The REDUNDANT and HOLDOVER state are defined in 17.10.1, but the other two are not specified. If the Clause 17.12 is to specify functions for each states, it's better to make the sub-clauses of 17.12 to be consistent with the states of 17.10.1.

## SuggestedRemedy

Propose to make the sub-clauses of 17.12 to be consistent with the state definition of Clause 17.10.1

DISCUSS. Group 44, 84, and 144. It is not clear how to do this.

Note that 17.12.1 and 17.12.2 apply to the conditions listed, regardless of the state. Note that the actions described in 17.12.1 through 17.12.4 (including actions indicated in 45-48) are not indicated in the HotStandbySystem state machine; they are instead indicated verbally, and are done. Should we add one or more additional state machines for these actions?

# Clauses 17.10.1 and 17.12

- Clause 17.10.1 describes the state of the Hot StandbySystem
  - a) INIT
  - b) REDUNDANT
  - c) FAULT
  - d) HOLDOVER
- Clause 17.12 describes how PTP Instances provides redundant time to the application
  - 17.12 State requirements
    - 17.12.1 Primary grandmaster
    - 12.12.2 Secondary grandmaster in REDUNDANT state
    - 12.12.3 Slave
    - 12.12.4 Holdover

# Clause 17.12

- Clause 17.12 describes how PTP Instances provides redundant time to the application
  - 17.12 ~~State~~ HotStandbySystem requirements
    - 17.12.1 Primary grandmaster
    - 12.12.2 Secondary grandmaster in REDUNDANT state
    - 12.12.3 Slave
    - 12.12.4 ~~Holdover~~ PTP instances not SYNCED

# Clause 17.12.4

## 12.12.4 ~~Holdover~~ PTP instances not SYNCED

When the primary and secondary PTP Instances are not SYNCED, ~~When the~~ HotStandbySystemState is HOLDOVER, the HotStandbySystem shall transfer phase and frequency from the ClockSlave ~~of the primary PTP Instance, that was SYNCED before going~~ into holdover to the HotStandbyClockTarget.

During HOLDOVER state, time synchronization performance is not required to meet the respective application or TSN profile requirements. Nevertheless, in order to mitigate drift, the ~~primary~~ PTP Instance should adjust phase/frequency of its local time using the data stored in REDUNDANT or ~~FAULT~~ NOT\_REDUNDANT state

# Re-organization of Clause 17

- As an example, clause 10.3.11 of 802.1AS is organized as follows:

- 10.3.11 PortAnnounceReceive state machine

- 10.3.11.1 State machine variables

- 10.3.11.2 State machine functions

- 10.3.11.3 State diagram

- Clause 17 of 802.1ASdm could be organized in a similar way

- 17.4 HotStandby state machine

- 17.4.1 State machine global variables (17.5 in current draft)

- 17.4.2 State machine local variables (17.6 in current draft)

- 17.4.3 State machine functions (17.7 in current draft)

- 17.4.4 State diagram (17.8 in current draft)

- 17.5 HotstandbySystem state machine (17.9 in current draft)

- 17.5.1 State machine global variables (17.10 in current draft)

- 17.5.2 State machine local variables (17.11 in current draft)

- 17.5.3 **HotStandbySystem** requirements (17.12 in current draft)

- 17.5.4 State diagram (17.13 in current draft)

# Comments 81, 107 and 113

- Comments 107 and 113 was agreed in principle to remove the word “FAULT” from the holdover description.
- Comment 81 was agreed in principle to change the word “FAULT” to “NOT\_REDUNDANT”
- Based on the resolution of comment 81, the resolution of comments 107 and 113 should be to change “FAULT” to “NOT\_REDUNDANT” instead of removing the word “FAULT”