802.1ASdr Editor's Update

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IEEE 802.1 Maintenance

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PAR - 1

- The Scope of 802.1ASdr as stated in the PAR is as follows

    5.2.b Scope of the project: This amendment changes the non-inclusive, insensitive, and deprecated terminology including those identified by IEEE P1588g and IEEE editorial staff, replacing them with their suitable terminology wherever possible.

- The PAR states the dependence on IEEE P1588g

    5.3 Is the completion of this standard contingent upon the completion of another standard? Yes

    Explanation: The amendment depends upon the alternative terminology selected by IEEE P1588g. The Project Authorization Request (PAR) is submitted prior to the completion of IEEE P1588g to expedite changes and industry alignment on inclusive terminology.

PAR - 2

- The Purpose of 802.1ASdr as stated in the PAR is as follows

  5.4 Purpose: This standard enables systems to meet the respective jitter, wander, and time-synchronization requirements for time-sensitive applications, including those that involve multiple streams delivered to multiple end stations. To facilitate the widespread use of packet networks for these applications, synchronization information is one of the components needed at each network element where time-sensitive application data are mapped or demapped or a time-sensitive function is performed. This standard leverages the work of the IEEE 1588 Working Group by developing the additional specifications needed to address these requirements.

- The Need for 802.1ASdr as stated in the PAR is as follows

  5.5 Need for the Project: IEEE Std 802.1AS-2020, includes a profile of IEEE Std 1588-2019, and uses noninclusive terms to describe port states and clock roles in a Precision Time Protocol (PTP) network. IEEE SA has recently resolved that IEEE standards should be written in such a way as to avoid non-inclusive and insensitive terminology. IEEE P1588g is developing a consensus on the preferred alternative terminology. In order to avoid confusion in industry, this project selects from the IEEE P1588g alternative terms to describe PTP functionality.

Non-inclusive terms in IEEE 802.1AS – 1

Master is used 1169 times in the document

- Master
- Grandmaster
- ClockMasterSyncSend
- ClockMasterSyncReceive
- ClockMasterSyncOffset
- ClockMasterReceive
- ClockMaster
- MasterPort
- masterTime
- clockMasterLogSyncInterval
- updateMasterTime
- masterPriorityVector

- RepeatedMasterInfo
- SUPERIOR_MASTER_PORT
- masterPriority
- masterStepsRemoved
- SuperiorMasterInfo
- InferiorMasterInfo
- INFERIOR_MASTER_OR_OTHER_PORT_UPDATE
- grandmasterIdentity
- grandmasterClockQuality
- grandmasterPriority1
- grandmasterPriority2
- alternateMasterFlag

- rcvdMDSyncDot11MasterA
- initReqParamsDot11MasterB
- ftmReqGrantedMaster
- offsetFromMaster
- AcceptableMaster
- AcceptableMasterTable
- AcceptableMasterTableDS
- AcceptableMasterTableEnabled
- AcceptableMasterPort
- AcceptableMasterPortDS
- AcceptableMasterArray
- ftmReqGrantedMaster

Non-inclusive terms in IEEE 802.1AS – 2

Slave is used 338 times in the document

- Slave
- ClockSlaveSync
- ClockSlaveTime
- ClockSlave
- slaveTimeCallback
- slaveTimeCallbackPhase
- SlavePort
- rcvdClockSlaveTime

- updateSlaveTime
- dot11SlaveMac
- slaveMacOfLastRequest
- initReqParamsDot11Slave
- ftmReqGrantedSlave
- setMDSyncParamsDot11Slave
- setMDSyncReceiveDot11Slave
- slaveOnlyClock

P1588g update – 1

- Leader-Follower was selected as an alternative nomenclature for Master-Slave in the straw poll run-off

- A Working Group ballot for IEEE P1588g/D1.0 closed on October 15, 2021
  - Comments were received against the adoption of leader-follower as and alternative to master-slave.
  - Comments were received regarding Grandmaster not being part of the scope of the project

- The process used for choosing leader-follower as an alternative to master-slave did not allow people to vote "no" for terms that they find objectable. A better process would have been to allow the least objectable term to be selected

P1588g update – 2

- It was decided to not revise the PAR to include Grandmaster, as this would delay the project

- Leader-follower as and alternative to master-slave can be addressed quickly, and therefore a new straw poll has started to ask members to object to up to seven previously proposed terms

  1. Leader-follower
  2. Principal-subsidiary
  3. Primary-secondary
  4. Server-client
  5. Master-follower
  6. Master-client
  7. Broadcaster-listener
  8. Master-subordinate
  9. Master-receiver
  10. Source-sink
  11. Controller-responder
  12. Emitter-listener
  13. SyncSender-SyncReceiver
  14. TimeTransmitter-TimeReceiver

- Once the first straw poll is finished to exclude terms that are not acceptable, a new straw poll will be conducted to select the new alternative terminology to master-slave

- The first straw poll closes on November 17, 2021

IEEE 802.1ASdr next steps

- The editor will work on the IEEE 802.1ASdr draft as soon as P1588g is stable and has decided on the new terminology

Thank you!