

802.1ASdr Editor's Update

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IEEE 802.1 Maintenance

September 13, 2022

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

- SA ballot was closed in July 2022
 - Only few comments, therefore only few changes in the draft
- SA recirculation ballot is open, it will close on September 16

P1588g update - 2

- P1588g adds Clause 4.4 related to alternative optional terminology
 - “timeTransmitter” can be used as an alternative nomenclature for “master”
 - “timeReceiver” can be used as an alternative nomenclature for “slave”
 - Capitalization of the terms to be used are “TimeTransmitter” for “Master” and “TimeReceiver” for “Slave”
 - Compound words can also use the same replacements, for example “<foreignMasterList>” becomes “<foreignTimeTransmitterList>”
 - “BMCA” is replaced by “BTCA”, as “Best Master Clock Algorithm” is replaced by “Best TimeTransmitter Clock Algorithm”
 - For Port state names, MASTER becomes “TIME_TRANSMITTER” and SLAVE becomes “TIME_RECEIVER”
 - Abbreviations: “TT” for timeTransmitter, TimeTransmitter, and TIME_TRANSMITTER, and “TR” for timeReceiver, TimeReceiver, and TIME_RECEIVER
 - Grandmaster remains Grandmaster

P802.1ASdr update – 1

- The same terms as P1588g are used in the draft for P802.1ASdr
 - Compound words use the same replacements, for example “ClockSlaveSync” has been replaced by “ClockTimeReceiverSync”, “masterStepsRemoved” has been replaced by “timeTransmitStepsRemoved”
- Grandmaster is an exception
 - Grandmaster has been replaced by GrandtimeReceiver
 - grandmaster has been replaced by grandtimeReceiver
 - Gm has been replaced by Gt
 - gm has been replaced by gt

P802.1ASdr update – 2

- The first draft of P802.1ASdr includes all clauses, even the clauses that have no changes, the following editor's note was added at the very beginning of the draft.
<<Editor's note: All clauses of the published 802.1AS are included in this draft, even the clauses that have no changes have been included. The Editor wants to make sure that all non-inclusive terminology has been addressed.>>
- P802.1ASdr is a different amendment, and therefore there is benefit to include all clauses in the final version. The following editor's note was added at the very beginning of the draft.
<<Editor's note: It is the view of the Editor that all clauses, including the clauses that have not been changed, should be part of P802.1ASdr Amendment, as it will be too difficult for a reader to parse the whole document if only clauses that were changed is part of the amendment. Comments are requested.>>

P802.1ASdr update – 3

- Clause 15.6 includes MIB modules definitions
 - MIB changes are made to the MIB text to create a new MIB, and it is imported into Framemaker
 - For IEEE 802.1AS, an editor was assigned to work on the MIB
 - It has been decided to not include MIB in P802.1ASdm
 - There is a need to have many MIB updates in 802.1ASdr for the new terminology
 - Should MIB be included in P802.1ASdr? If so, will an editor be assigned?

IEEE 802.1ASdr next steps

- The first draft of IEEE 802.1ASdr is ready for Task Group ballot

Thank you!