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# **AVB TG**

# **Dallas, TX, USA**

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# Agenda (overall)

- P802.1AS (time synch) - Tue AM/PM
  - Review of P802.1AS draft 0.3.3 (Garner) 2 hours
    - Plus another preso from Geoff on BMC selection
  - Use of 802.11v for 802.1AS (Stanton) 1 hour
- P802.1Qat (simple reservation protocol) - Tue PM/Wed AM
  - Review of P802.1Qat status (Feng) 2 hours
  - Alternatives for reservations in SRP (MJT) 1 hour
- “P802.1Qav” (time sensitive streams) - Wed AM/PM
  - 802.1Qav PAR updates (Yong) 10 minutes-2 hours (depending on comments)
  - Priorities and scheduling alternatives (MJT) 1 hour

# Agenda/notes (Tuesday)

- 09.00-09.30 Administrivia/agenda update
- 09.30-18.00 P802.1AS time synch:
  - 09.20 Use of IEEE 1588 Best Master Clock Algorithm in IEEE 802.1AS - Garner
    - need to avoid split of network as allowed by current 1588 for class 1/2 clocks
    - Geoff to discuss with 1588
  - 12.30 Review of P802.1AS d0.3.3
    - need to select protocol ID field
    - strongly prefer transport ID nibble (early agreement on time stamp trigger was assumed by implementors to mean first octet after ethertype contained both protocol ID and time-stamp flag)
    - note sent to 1588 chair, MJT to poll 802.1 reflector for further opinions
    - do we drop the TC and only use "S-BC"?
      - no! side discussions on TC using single grand master by following where synchs are coming from, with some hysteresis

# Agenda/notes (Wednesday, Part I)

- 08.45-9.30 : Presentation on 802.1AS to 802.11v, along with request for extra information needed by 802.1AS.
  - 802.11v agrees
- 9.30-10.30 : P802.1Qav PAR review
  - Comments from 802.11 included (explicit support for wireless LANs and mixed wired/wireless bridged networks)
- 10.30-12.30 : P802.1Qat SRP review
  - 0.2 draft update
  - discussion of “retaining vs non-retaining” options (“retaining” means that a failed reservation leaves some links with dangling resource allocations that need to be cleaned up by listener with an explicit release, while “non-retaining” means that the network does this automatically)
  - discussion of original white paper reservation system
  - MJT to produce a quick preso/paper comparing the options so that the group can make a decision
  - “dynamic reallocation” option dropped, but could be reopened if someone drives the requirement and figures out a simple method

# Agenda/notes (Wednesday, Part 2)

- 13.30-17.00 : P802.1Qav? time sensitive streams
  - Queuing priorities (MJT): to support Max's analysis the traffic-shaped classes (5/4) must have top priority once they pass the traffic shaping gate
    - Class 7/6/3/2/0/1 in priority order after that?
    - Perhaps treat 7/6 as special traffic-shaped classes to enforce their use for "slow protocols"? (Highest priority, but only if infrequently used?)
    - Perhaps do fine-grained traffic shaping on 4/5 to allow a short 7/6 to slip within 4/5 bursts?
  - Ingress filtering to enforce reservations
    - Drop violating streams, or remap to lower priorities?
    - Dropping is only way to guarantee downstream bridges are not affected

# Agenda/notes (Wednesday, Part 3)

- 13.30-16.00 : P802.1Qav? time sensitive streams (cont)
  - AV cloud edge class remapping
    - Class 4/5 from legacy port remapped to 3?
  - Need to restore priority on packets passing through AVB cloud
    - Needed for MSFT “qWAVE” requirements
    - Q-in-Q would work, but that is a PBT thing ... how much of PBT to include?
    - Need to discuss with rest of 802.1
- 16.00-17.00 : More P802.1Qat SRP
  - reservations need to move on same path as data
  - implies that SRP moves on VLAN path
    - need to discuss with the rest of 802.1

# Future work/action items

- 1588 cooperation ....
  - Coexistence of non-802.1AS 1588 using protocol ID
  - Don't split network in the presence of multiple class 1/2 clocks
- Setting up the QoS-managed cloud
  - Using LLDP and 802.1AS functions, where do we put this information?
  - Supporting LLDP revision (P802.1ABaw?)
- G.8261 relationship
  - G.8261/Y.1361 (05/2006) Ethernet over Transport aspects – Quality and availability
    - others in development (G.paclock/G.pacmod)
  - Propose a paper to be given at joint ITU/802.1 workshop