Audio Video Bridging (AVB) Assumptions

IEEE 802.1 AVB Conference Call

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AVB Assumptions

- Link Speed
  - 802.3: 100 Mbit/sec or faster (i.e., no 10 Mbit support)
  - 802.11: ??
- Link Duplex
  - 802.3: Full Duplex only (i.e., no half duplex support)
  - 802.11: ??
- Maximum Frame Size
  - 802.3: 1522 bytes? Or 2000 bytes? (i.e., no Jumbo frame support)
  - 802.11: ??
- Flow Control
  - Flow Control is not supported and cannot be used on AVB links
- Tagging
  - All AVB Streams will be Q Tagged
  - All PTP frames (for 802.1AS) will NOT be Q Tagged

AVB Assumptions

- Priorities
  - AVB ISO-5 Streams will use a Q Tag priority of 5
  - AVB ISO-4 Streams will use a Q Tag priority of 4
  - Legacy frames in the AVB cloud CANNOT use Q Tag priorities of 4 or 5
    - What about Vista?
- Class Observation Interval
  - AVB ISO-5 is 125 uSec
  - AVB ISO-4 is 1 mSec
- Latency
  - 802.3: Less than 2 mSec over 7 bridge hops
  - 802.11: ??
- PTP Clock Quality
  - Bridges: +/- 100ppm from 25 MHz clock (i.e., bridges are not syntonized)
  - End point syntonization accuracy <= 1 uSec

AVB Assumptions

- Stream Identification
  - Q Tag priority 4 or 5 entering an AVB port
  - MAC address?
- MAC Address
  - Multicast Range?
  - Unicast?
- Other Assumptions …
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