Forwarding of unknown-DA SR-Class-priority multicast AVB frames

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Abstract

This presentation asks what the appropriate behavior is if a Talker transmits a frame with a multicast address and with an SR-class priority, but no associated reservation is known to the bridge.
An example of The Situation

- Talker is in the cloud
- Talker sends ClassA Frames
  - DA = Multicast
  - UserPriority=SR-ClassA
- Bridge A doesn’t know DA
- Assuming that Bridge A FLOODs
  - Legacy Bridge receives the frame
- If Idle Slope = 0 on a port
  - Bridge A sends first frame to the AVB Bridge
- Else [Idle Slope > 0]
  - Bridge A interleaves with other AVB streams
    - Disrupting ALL streams in the entire AVB cloud flowing in the same direction
Questions

• If there is no reservation registered on a port, is the Qav shaper active? With IdleSlope=0?
  – Was it intended that the first frame would be transmitted
  – What about the other frames enqueued forever waiting for credits to increase back up to zero?

• Is this condition easily detectable (relative to a Talker that exceeds its reservation)?

• Should bridges drop unknown multicast frames that have SR Class priority entering a SR Domain Core Port?
  – Consensus is “YES”

• Do we want to do add something to 802.1BA?
  – No—fix this in Q-Rev