RTP Clock Source Signaling
draft-ietf-avtcore-clksrc-01

Aidan Williams, Audinate
Kevin Gross, AVA Networks
Changes in clksrc-01

• More detail in recent email to the list
• Three issues for discussion today:
  – Clock “confidence” / “quality” signaling
  – Clock stratum signaling
  – Stream reference media clock section update
Issue: “confidence” / “quality”

- Changes after discussion at the last IETF
- Originally included to support IDMS
  - A simple “clock check” mechanism
- Terminology change: “confidence” -> “quality”
  - “confidence” implied something statistical
- On further reflection, it could be removed
  - Statistical quality measures fit better into RTCP
  - IDMS authors are OK with it being removed
Issue: clock stratum signaling

• Last IETF, a generic traceable clock type, identified by stratum value was suggested
  – Avoid the need for “gps”, “galileo”, etc clock types

• After researching, found
  – Stratum describes interconnection of NTP clocks
  – Stratum no longer a reliable indicator that clocks are synchronized

• Conclusion: We believe signaling the source of the clock is the most appropriate and reliable method for signaling a timestamp clock
Device C signals that the media clock for transmitted streams (e.g. C->D) is locked to the stream from the mixer.
Stream-ref media clock signalling

• Identify media clock master with a media clock ID
  – EUI48
  – Generated using RFC6222 “short-term persistent RTCP CNAME” algorithm (can pick MAC address)
  – No IP addresses, SSRCs, CNAMEs, etc

• Media clock master stream SDP
  – a=ssrc:12345 mediaklc:mastre id=EUI48

• Media clock slave stream SDP
  – a=mediaklc:slave id=EUI48
Next steps

• Next revision should be ready for WGLC
  – Remove “quality” signalling
    • Confirm on the mailing list
  – Review, fix a few typos
  – Address feedback people have on this draft

• Now would be a good time for people to read/review this draft

• Any other issues?