

Unannounced SSRCs

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The Normal Case

- PeerConnections signal MediaStreamTracks to each other using a=msid
- a=msid gives <stream ID> and <track ID>
- This allows MediaStreams and MediaStreamTracks to be created consistently at recipient

The Interoperability Case

- Non-WebRTC endpoints don't send a=msid
- They expect some behaviour from the WebRTC endpoint
 - Synchronization
 - Grouping
- Behaviour needs to be predictable
 - More important than “logical”!

What non-WebRTC endpoints expect

- Media should play out on arrival
- Media with one CNAME should be synchronized
 - what this means isn't 100% clear, though - see LS

Alternative proposals

- All incoming media in one MediaStream
 - If CNAMEs differ, may violate synchronization assumption
- Each incoming media in its own MediaStream (current)
 - If CNAMEs are the same, hides synchronization assumption
- Group incoming media on CNAME
 - Requires waiting for CNAME to arrive

CNAMEs and WebRTC



- CNAME identifies a synchronization context
- For local media, no problem - same clock
- For relayed media, may be a problem
- For streams made out of mixed tracks:
what?
- Decision at IETF: One CNAME per context
 - Can be changed later, if we work out semantics
 - Remote streams must be re-clocked to local clock
 - This allows tracks to be freely mixed

Grouping on CNAME

- CNAME may or may not be in the SDP
- CNAME is in the RTCP SDES item
 - May arrive early (recommended for fast sync)
 - May not arrive early
- We cannot call “onaddtrack” until we know what stream to call it on.
- If RTCP is late, clipping will happen.
- Is this a problem?

Decision?