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March 2013

v4

How we can be done now with no changes to SDP

- Each camera encoding gets it's own m-line

- Each m-line has one a=label attributes that indicates the name of the W3C Media Stream the track is in

- Packet demux done by looking at combination of both PT and SSRC

- Can use the a=ssrc lines to indicate the SSRC

Extension to previous

- Use dummy ice trick of using port 9 for MSO that are not meant to work if you can not do bundle

- Add a multi-render attribute that allows multiple m-lines with same properties to be collapsed to a single m-line

- Complete a=msid for PC-Stream mapping instead of label

- Could add a new identifier that was put in offer for given encoding and then MAY be added to the RTP Header Extension of incoming packet

- Define a simulcast group

- Define a "priority" concept to allow one side to request how other side should allocate relative bandwidth

Friday, March 15, 13

Solves

- Multi camera , layered, FEC, asymmetric media , ICE, redundant encodings , QoS, early media ....

- No issues with SSRC collisions

- Turn on and off flows with sendonly / recvonly

- Change resolutions with normal SDP resolution

Glare less Add

- Can be done by JS Application using the existing API but relies on application knowing capabilities of far side

- Each m-line block has a unique mid

- Once initial offer/answer established, each side can send one-way m-block updates

- Now both sides can add a new one way stream at the same time

- On future full offer/answer exchanges, each side has to reorder incoming SDP using the mid to match the local order

What it take to make SSRC signaling work

- New negotiation layer a=ssrc, a=remote-ssrc

- Make stuff work with "prev-ssrc" attribute

- Define a way to reject streams

- Define new groups for simulcast, layer (FEC, RTX done)

- Define ssrc level attributes:

  imagesize, framerate, send/recv, fmtp (done), content, label

- (Note pretty much most of the above is in lennox draft)

- Things that do not work with mux get separate m-lines, otherwise all go under one m-line for audio, one m-line for video

API Things

- Need an indicate an API layer that allows you to select number and resolutions,framerate of layers

- Need to label stream as workable with legacy