

The following are notes from Cullen and Sean.

Cullen's notes:

* make sure to add note well slide to slide deck

LS Behavior

- Magnus points out that if JSEP overrides 5888, we will have issue with legacy things
- Martin points needs more thought to make declarative groups
- Martin raised point that we might be able to add some extra signaling that indicates that we can support this declarative LS usage

Conclusion: Magnus will dig into more analysis of options on this and send to list. No decision on Option 1,2

ImageAttr specification (receiver)

- people are good on what we send (intersection)
- do need to talk more about with receiving min or not

b= slide

- no issues

c= slide

- no issue

Note :: does not work in c line but the 0.0.0.0 does

Moving on to Open Issue slides

Issue #9 - changing b=

Do we need to deal with bs=RS/RR

Magnus - reason to honor this... consider use case with middle box where middle box wants to tune RTCP to ensure the middle box gets enough feedback. 5% is a problem if you want rapid feedback and low bit rate media. So you might want to use this to up it.

Randal - might want to be up this above 5% to improve bandwidth estimation

Magnus - thinks we need to be able to set them and have endpoint honor them

Randal - use case is what if you want to send feedback on every frame of a video for some congestion control use case

Justin - hard to implement and not clear at this point

Randal - propose what we implement now is if you receive this, you will not go over the specified value (but does not mean that the implementation would necessarily send more)

Magnus propose. Browsers set it (at default 5% is fine). This allows middle boxes to change. And browsers interpret it and do not exceed it.

Conclusion: browser need to be able to receive RS/RR and honor it

#144 b= at session level

- no objections

#122 b=TIAS

- OK with this

#148/149 a=ssrc

- Question can we list both and switch ?

- read more in <https://tools.ietf.org/html/rfc7160>

- HTA raise point that switching is not going to happen in a session with simulcast

- HTA proposal, if on a session that is not simulcast, and you see a SSRC switch, just deal with it

Next steps: go study what this hybrid approach would look like

question on imageattr - what happens when rotate

Proposal: always send image attr in landscape and rely on CVO for rotations. We need to take this idea and circulate widely (such as 3GPP).

Randal - what if native is not rotated.

CVO is Coordination of Video Orientation (CVO) section 7.4.5 of [TS26.114]

Probably needs some offline discussion.

Conclusion: Magnus will see if he can get someone to explain where the 3GPP and related standards are on this.

#16 Accessors

- no comments

Skip forward to last slide on Upscaling video

Upscaling video

Conclusion:

- we add some sort of switch that sets if upscale is allowed or not
- default is to allow upscale

Sean's notes:

We started relatively on time.

I noted that we were recording the session. Location of the recorded audio file to be provided once I figure out where it is.

Keith rightly pointed out that if we need a note well slide. Sean found one and flashed it up (see <http://www.ietf.org/proceedings/interim/2015/06/18/rtcweb/slides/slides-interim-2015-rtcweb-1-1.pdf>).

We had 15+ people on the call.

The headings relate to the slide headings from the following presentation:

<http://www.ietf.org/proceedings/interim/2015/06/18/rtcweb/slides/slides-interim-2015-rtcweb-1-0.pdf>

LS Behavior

Magnus - need to be careful about overriding RFC 5888

Justin - Even if we update still can't deal with legacy clients

mt - We've created two groupings ...

Harald - Are we getting any advantage by defining a new group?

mt - Providing info to legacy devices

Justin - seems like it's work except for this (legacy)

Magnus - If it's a corner case won't option 2 just work?

mt - what benefit do we get to reusing declarative groups?

Cullen - we get backward compatibility with those that implement it

Robin - Is backward compatibility an issue with complex scenarios?

mt - Further carve out? We don't want to confuse older clients

Cullen/Justin - It supports "hey this is what I want, please do it"

mt - does it happen in the wild? If it doesn't issue seems like a lot of complexity.

Magnus - Additional options include: option 3 - make a new grouping, 4 some other "horrible" thing indicating you support 5888bis.

Harald - we have "msid" if we need to sort tracks.

Harald - option 2 seems fine

ekr - any kind of testing to be done here?

mt - unknowable if supported unless we do testing.

Cullen - browsers sending unsynched?

Justin - yes

Conclusion - Magnus agreed to do some research about impacts of the two options and send his result to the list. There was no decision at this time about whether to go with option 1 or 2.

ImageAttr specification (receiver)

mt - why do you need a range?

Justin - not dealing with simulcast.

mt - for simulcast just "min" would be applied.

Justin - we could just do max

mt - do we care?

Magnus - What are the semantics for a single value?

Cullen - subsetting of max -> that ship sailed

ekr - No value is required for min. we need to process other people's zeros.

Randell - agrees

Magnus - existing list values supported.

Justin - seems like we're okay

Conclusion: People seemed happy to send the intersection, but we need to talk about receiving min (or not)

b=

- no issues

c=

? - What does it mean to process c=?

Justin - Check syntax ONLY

Require that it be sent?

Yes

- no issue

Note :: does not work in c line but the 0.0.0.0 does

Issue #9

Do we need to deal with bs=RS/RR?

Magnus - It's for middleboxes to tune use of RS/RR. 5% is fine for lots of cases.

Randell - 5% might be needed for monitoring?

Justin - If it's set too low then there's a problem. Setting it too high is okay.

Randell - Allowed to send reports won't always use allocated amount.

Randell - Say all must implement but don't say anything about setting?

Justin - Magnus/Randell don't set but honor it higher.

Conclusion: Browser need to be able to receive RS/RR and honor it.

#144

- no objections

#122

Everybody was okay with this.

#148/149

? - offer a bunch

Magnus - Can't do that.

Cullen - how do we deal with DTMF?

Magnus - Not a problem it's the same clock rate.

Keith - Which is the non-webrtc, don't need ssrc, change to diff ssrc with new value

Christer - What's least work required mean?

Justin - it's not clear

Roman? - Not implemented in browsers.

Justin - Not entirely true, this could also screw up jitter

Cullen - Do firewalls have an impact?

Justin - More study is needed if we do #2, need to document the downside of option #1.

Harald - Should/could we separate simulcast and clock rate?

Magnus - Simulcast is not well specified

Justin - Hybrid approach seems best.

Conclusion: Study what this hybrid approach would look like

imageattr: rotate!?

Magnus - needs to check with 3GPP and mmusic

Randell: Sounds good generally, but what happens if rotated is 720X1280, what if native isn't landscape?

Justin - needs to be bound by imageattr

Keith - What do 3GPP do?

Cullen - It's in release 12.

Conclusion: Magnus to check with his peeps about 3GPP and related standards.

#16

w3c to sort it out

... Skipping some slides ...

Upscale

Justin - do we fail or do we upscale?

Magnus - do we need to specify?

Cullen - I can envision devices need video out at a certain or fail.

Justin - app could always do it. Reject unless app notices then do it itself.

mt - no api to upscale

Cullen - Canvas might work (this turns into a rathole Cullen apologies)

Justin - What are the 2119 words: SHOULD NOT?

Magnus - Don't upscale unless requested

Justin - we can get stats on in vs out to determine if it's upscaled

mt - Upscale by default

Justin - Update should be the default.

Conclusion:

- Add some data to set if upscale is allowed
- Default is to allow upscale