Video Interest Group   Mar 27, 2019

Agenda

0/ Agenda bash

1/ SVA Open Caching Update — Sanjay Mishra

   See www.streamingvideoalliance.org/technical-work/working-groups/open-caching/

2/ Multicast Video — Jake Holland

3/ LURK -- update and next steps -- Daniel Migault

4/ Secure Reliable Transport (SRT) -- Marc Cymontkowski

5/ Tour de table — what people are working on with video at IETF

6/ AOB

Notes

0/ Agenda bash

Whither VIG — brief update of yesterday's discussion: a dozen people participated in the discussion (operators, vendors, long time IETF folks), and the final leaning was towards an OPS WG, providing a landing point for newcomers to the IETF, and vectoring work items to appropriate other Areas. (MBONED as an example WG)

1/ SVA Open Caching Update — Sanjay Mishra

Open Caching — Streaming Video Alliance (SVA)'s work on a special case of IETF's CDNI Working Group

Sanjay highlighted the points of coincidence between Open Caching, and proposed (LURK) and ongoing (CDNI) work at the IETF.

Jake Holland - is the hackathon work open source, or available for testing?

LURK is on github. It's working. Built in python. Jake may find someone to play with it :-)

2/ Multicast Video – Jake Holland

Jake did the math on Akamai's published numbers of unicast traffic, and compared it to number of viewers of (popular) broadcast items (e.g., World Cup).   The takeaway: Akamai's unicast delivery record is about the same as No 197 of 207 top ranked Nielsen watch ratings. I.e., nowhere near ready for prime time.

Mbone today – limited deployment (in Internet2).

Multicast – hard, but compared to the alternatives of server footprint/fibre deployment… might not be so bad

3/ LURK -- update and next steps -- Daniel Migault

CDN is only one of the use cases; interested in looking at using LURK with a trusted environment.

Hoping for solid implementation and spec for TLS1.3 by the time of Montreal – will have a proposal at SECDISPATCH, hoping for a WG

4/ SRT -- Marc Cymontkowski

Haivision – where Marc works

SRT – Secure Reliable Transport

Alliance – about 200 companies supporting SRT and implementing it

Purpose: Correct for unpredicatable network impairments that hinder real-time audio, video and metadata (packet loss, jitter, delay between sender and receiver, bandwidth fluctuations)

Open source – wondering if it is something that the IETF would be useful for

Giri – how does it compare to webrtc?

> SRT is a pure network protocol, decoupled from the application (though Giri points out that the webrtc folks would talk about the data channel)

> SRT is more oriented toward moving things in the network (e.g., to data centre) not to the browser, so much

Jake – thinks it would be useful to get some regular updates, if only we had a media ops WG

5/ Tour de table – what people are working on with video at IETF

Kyle Rose – working on multicast video stuff (with Jake). Loss tolerant, asymmetric authentication for multicast (more efficient than signing individual packets).

> Glenn Deen – watermarking insertion – how does it work?

>> Jake's vision – similar to what we already have for encryption. Thinking of trusted compute environments and securing through the securing of channels

>> Glenn – interested in it not only for authentication and anti-piracy; interested for tracking and other examples.   Kyle observes trusted compute environments would not help

>> Harald Alvestrand – have you looked at MLS for key distribution

Attendees

Giri Mandyam (Qualcomm)

Dan Druta (AT&T)

Stephen Botzko (Poly)

Daniel Migault (Ericsson)

Greg Shepherd (Cisco)

Marc Cymontkowski (Haivision)

Harald Alvestrand (Cisco) – for end of meeting

Sandra Murphy (Tislabs)

Eric Vynke (Cisco / INT AD)

Luis M. Contreras (Telefonica)

Matt Green (BT)

Lucas Pardue (Cloudflare)

Craig Taylor (BBC)

Emile Stephan (Orange)

Roni Even (Huawei)

Kyle Rose (Akamai)

Sanjay Mishra (Verizon)

Frederic Fieau (Orange)

Jake Holland (Akamai)