

# Video Interest Group at IETF 103

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*November 7, 2018.*

## Agenda

14h30

0/ Agenda bash

14h35

1/ Sanjay Mishra — LURK update

2/ Ori Finkelman — CDN HTTP Redirect

3/ Ori & Sanjay — SVA Opencaching update

4/ Thomas Fossati — Video/congestion [TBC]

15h35

5/ Nexts...

6/ AOB

16h00

## Agenda bash

Tour de table introductions – see list of attendees below.

All presentation slides are available in the IETF GGIE mailing list archive

(<https://mailarchive.ietf.org/arch/browse/ggie/>)

## LURK update

*Sanjay Mishra*

- IETF Hackathon Secure Channel for CDNI delegation
- Keyless SSL
- Focussed on client-server handshake at hackathon
  - Daniel Migault, not here, worked on that
- Thomas Fossatti questions — plans to open source? Standardize?
  - Sanjay — Open Caching WG (of SVA) is not writing standards, will take anything needing standardization back to the IETF
  - LURK interface — Sanjay will bring it to the CDNI chairs to see if there is interested in taking it on as a work item

- No strategy in place to make this open source, but that is the intention
- Glenn Deen — are you seeing the need for new trust models?
  - Sounds like they are so far making existing trust models work for them

## **SVA Opencaching update**

*Ori Finkelman*

- Pre-positioning (home caching) — the canonical example is new episodes of Game of Thrones. Want to position the material at residential caches up to the night before, rather than having everyone hit the network at the same time when they officially become available
- 5G MEC Caching — Multi-access Edge Caching
- URI signing — are writing an I-D on it
  - Chris Lemmons points out that CDNI has just done provisional approval of a draft on a URI signing draft; wonders how it relates to this work
    - Ori — this is addressing a slightly different part of the problem and is complementary
- Thomas — where is the home cache? CPE, or?
  - Ori — either in the set top box, or home gateway, or NAT device if you have one. It's a general idea. Starting by proving there is a good use case

## **CDN HTTP Redirect**

*Ori Finkelman*

- Some video clients don't implement HTTP 302 redirect correctly
  - If you get the reference from within an HTML document, what you might get as the base URI is the HTML document, which isn't what you want. You want the base URI to be the one that has been handed to you from the doc
  - Lack of clarity in the URI spec

- Thomas — “sees the light” — the problem is when a client gets a URI from an API that doesn’t expose that it has had a redirect. So, you should tap the API guys, not the client/browser guys
- Kyle — could you look at User Agent tags and serve results differently to broken clients?
  - Groans in the room
  - But acknowledgement that is what is happening now, and may be a necessary fix until there is 100% uptake of the clarification
- James — points out that browsers and mobile device software are relatively easy to get updated, but TVs and other hardware are much harder/slower (because they don’t update)

## Video/congestion

*Thomas Fossati*

- MARC — Mobile Assisted Rate Control; work done by Morteza Kheirkhah, Gorry Fairhurst, Thomas Fossati
- Magnus — have you considered comparing it to SAND, a 3GPP-DASH item
  - Thomas had not heard of it; Magnus will send pointer
    - SAND (Server and network assisted DASH). Which is defined in in Section 13 (Rel 15) of 3GPP TS 26.247:  
<https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444>
- Dan — how do you ensure trustability?
  - Effectively — the expectation is that this is nearby networking/in the same administrative domain (closed environment), as opposed to the Internet, where middle

## AOB

- Glenn Deen— SVA update
  - Three WGs of interest
    - Geoloc in IPv6 — Glenn recognizes this is a big ask

- Live streaming is becoming a high priority
  - Live ingest
  - Live distribution
  - Looking at various protocols (low-level) that might be useful here — e.g., WebRTC? Potentially QUIC
- Security effort underway — bringing together a group of experts to write best practice documents around security in OTT environments

## Nexts...

- Leslie — is this useful; what would people want for Prague?
  - General agreement in the room that people met new people and learned new things, today
  - Jake Holland, specifically, happy to see a meeting in Prague. Can this be recorded for onward sharing. Whats the holdup of getting on the IETF agenda?
  - Glenn - has an ask. We're all in a bunch of different areas. Can we each nudge area directors.

## Attending

Leslie Daigle (Thinking Cat Enterprises)  
Glenn Deen (Comcast/NBCUniversal)  
Sanjay Mishra (Verizon)  
Thomas Fossatti (Nokia)  
Dan Druta (AT&T)  
Chris Lemmons. (Comcast)  
James Gruessing (BBC)  
Magnus Westerlund (Ericsson)  
Eric Vyncke (Cisco)  
Frédéric Fieau (Orange)  
Ross Finlayson(LiveNetworks AKA Live555)  
Kyle Rose (Akamai)  
Jake Holland (Akamai)  
Roni Even (Huawei)  
Danny Moses (Intel)  
Ori Finkelman (Qwilt)