IETF 92 TSVAREA session minutes

Chaired by Spencer Dawkins and Martin Stiemerling
Thanks to Mirja Kuehlewind (Monday session) and Allison Mankin (Friday session) for acting as notetakers
Thanks to the Meetecho team for your help in our sessions

TSVAREA @ IETF-92 1. Session: Monday Afternoon Session II 1520-1650 CDT

* Transport Area and NOMCOM (10 minutes)
Spencer has been selected for a second two-year term as TSV AD
Spencer and Martin are still working to open up the TSV AD role for more willing nominees
We'll be spending significant time on that during the Friday TSVAREA session, so please be thinking.

* Report from the IAB SEMI workshop (20 minutes) - Brian Trammell

Bob: TLS doesn't weaponize because it's inside transport -> TCPINC

Bob (reporting on ETSI NFV, at Brian's request): presented the output of the SEMI workshop; how much encryption there was scared people; got delegated to the security group; write guidelines weather and what to when dealing with end-to-end trackers; encourages them to come here as liasion because these people write the middleboxes
David Black (on UDP encaps): TSVWG is working on this: new GRE draft and 5405bis draft
Aaron Falk (on martini glass): discussion in TAPS on real-time and RTP: how does this relate to SPUD? Is this a cabal?
Colin: some things that concern me but might not understand well enough to have an answer now; we can talk more at the SPUD BOF, but different apps have very different requirements, especially for applications where trust relationships matter
Brian: not clear at this point which info should be exposed; but trust problem is out of scope; what is in scope needs to be discussed on Wed at SPUD
Bob: spud should not only focus at UDP, should be thinking about "inner space" (things you want to expose, and things you don't)
Brian: UDP works 90 percent of the time, which means we need a fallback -> (Mirja) +1 and come to the BoF
Tim: term 802-like link is wrong (in hourglass) -> hard to find right term, that's saying "what TCP was designed to run over". The metapoint is that LTE is completely different from "802-like".
Caitlin: support of multicast in SPUD -> (Brian) yes, not called out but in discussion by can link tube IDs for this use case
Bob: middlebox vendors are interested because they thought we would be affecting them with encryption but if that doesn't happen, should we still go this path?

* Introduction to HOPS (10 minutes) - Aaron Falk

Most of the people in the room were at the Sunday night Bar BOF
We just need to come up with a better understanding about what middleboxes are doing in a variety of networks that interfere with transport protocols in a variety of ways.
We want to instrument browsers on fixed and mobile endpoints to collect active measurements

Goal of the Bar BOF was to see who was willing to put this instrumentation in.
Lots of information is already being collected, but not necessarily being made public. These are passive measurements from Chrome and (probably) Firefox. We'll see what we can make available.

No comments

* DSCPs and Browsers (20 minutes) - David Black

Jana: is DSCOP what RTCweb would like to have from the wire or are they talking about bits?
David Black: they have it right: notion about what they would like to have ->please go read the DART draft: don't do SCTP multi-streaming; we need experience
Jana: for multi-homing app might not have the info how to set the bits; one DSCP per congestion control context because a different cp might resulting in different path
David Black: congestion controller shouldn't do that; expose multi-home though api instead
roland bless: DSCP:PHB mapping is just a recommendation; interconnection draft of Rüdiger David Black: hoping to move that forward; I'm author; but lower than best effort is not in focus
Magnus: SCTP multi-path ... is just not available..?
M. Welzl: rmcat is delay-based is simple to have them lower than best effort
Andrew: CS1 often treated as higher priority which is a highly deployed bug
Magnus: RTCweb has also scheduling prioritization (in front of congestion control)

* Heads-up about area discussions with respect to TSV (10 minutes) - Spencer Dawkins and Martin Stiemerling

Spencer talked about IESG changes to area structure, RFC 7475 allowing more than two ADs in an area - be thinking about what TSV needs in advance of the Wednesday Admin Plenary
We can't say strongly enough that we're willing to make changes, and we have more tools than we've had in the past.
Bob: consider that there is more and more work in app area that actually is doing transport work and it does not get reviewed in the transport area; that might be a structure problem -> send to the list
Martin: we're also working to reduce the time commitment required for ADs, but that's IESG-wide

Notes on the Transport Area Meeting, IETF92, Friday afternoon

From the ADs

Welcome to TSV area second session slow start: starting Fri afternoon 10 minutes before noon.

SPUD is turning into a big deal for TSV. Met objective of not forming a WG. About 200 people attended, most not reading email. Outcome of SEMI, related to IAB Stack Evolution programme. Spencer added to the IAB program on Weds. A lot of interest from community.

An observation: Spencer and Martin had kind of punted on RTG and INT caring about SPUD in previous discussions, but someone said the TRILL type folks care.

Coordination needed with other XoverUDP things

Prototyping to see what makes sense before working group

Some SEMI topics that didn't come up so much, but keep in mind: ApptoPath (A2P) signaling and P2A

Don't think of this as going in one direction: may be in a few WGs, in IRTF, floating items.

Architectural question: do we expose app info to NW?

The model for SEMI is likely the IAB workshop on P2P Infrastructure, which yielded 3-4 WGs and IRTF RGs..

Mic Brian Trammell not to be shot (a la Alamo) despite being from Tennessee.

Reason for stressing prototype let many transports bloom on the github prototype.

Transport Prime sitting upon SPUD. This prototype is just tube setup and teardown for a UDP datagram. Talk on the SPUD mailing list is the right thing to do.

Matt Mathis TCP's insistence on preserving idempotence was a fundamental error. Opportunity for heresy - what would happen if we changed that? It would help us with transition. Idempotence helped us with TCP Fast Open, etc. but we never really talked about this, we just did it. If you could open lots of TCP connections, that would speed things up, but we don't know at the transport level has side effects, so we can't replay it and know that we're doing the right thing.

Kevin Fall Should DTN or the DTNRG be involved in SPUD and Stack Evolution? If a server has out-of-order data in a cache, because it was received using FEC, etc. it could provide it without waiting, for instance.

Spencer "If nobody gets burned at the stake this year in TSV, we're not doing our jobs ..."

Jana Iyengar thoughts on Matt's comment - you cannot reasonably consider all GETS as idempotent even though that's what the spec says. About the SPUD prototype draw attention to the DTLS draft too. The prototype and the protocol are not the same. SPUD is more of those. The DTLS draft does something different that the prototype by offering up a different shim.

Spencer: we're still at the "but what about this?" level of precision in this discussion.

Brian thanks Jana for mentioning that. Please have this conversation on the SPUD list. It has implications for the use of SPUD from this we should do on list.

Matt it belongs in TAPS. It's what makes TAPS feasible.

Jana this is happening in TLS 1.3 WG zero connect work there.

Brian Everyone interested in the future of transport should be at TLS

Jana Should have gone to TLS working group 10 years ago.

Spencer We can tell Stephen and Kathleen they may already be TSV ADs. Problem solved.

Now move to second item. What we are going to do when we grow up. Review Jari's slides from the plenary on the general IESG Restructuring topic.. [Slide with four bullets]

Spencer thought emerging topics were not so big in TSV when talking to the 2013 Nomcom, but he got that wrong as he saw once in the job.

Some background: Benoit has given up a number of his WGs so he can focus on being the YANG coordinator for IESG.

Creation of ART area.

Various WG moves happen on ongoing basis, maybe more now, but not new - has been a retreat topic every year

Matt if responsible AD doesn't need to be from area, why does it matter what area group is chartered in.

Spencer WG stays with companion working groups, and all the working groups in an area are scheduled together

Matt sees working groups with ADs outside the area as orthogonal to area assignments

Brian Haberman speaking as an AD. Expand on AD being outside area. Also affinity (general) btw WGs in area. A fair number of ADs are not so pigeonholed in a single area.

David Black sometimes groups land very close to boundary. Example UTA which got Stephen Farrell as an out-of-area AD now even though it's in APP.

Spencer increasing amount of new work that spans or is on border. TCPINC is compelling example too, could have been in either TSV or SEC.

Discussion Points Slide

——————————————

Towards 50%

Spencer - Martin and I plan to ask for a third AD in the upcoming Nomcom cycle

TSV Triage We've asked Allison Mankin and Wes Eddy to help with this

Very interested in hearing community suggestions for how organize work and recruit management.

Matt recounts his proposal that he split an ADship with Nandita it was shot down by IESG processes, like only having one vote from two ADs.

I hate to draw the analogy, but Congressional Staff have a lot of the authority of their member, just don't cast ballots. Deputize assistant ADs who can't do a certain few things.

Brian Haberman - you guys should stop inviting me to these meetings. We have some very preliminary thoughts from a couple of ADs to do this. At the extreme, Stephen Farrell would like seven ADs and push a lot out to the community. A few ADs will experiment.

Spencer commercial for RFC 3933 process experiments, so that unsuccessful experiments just revert to the previous BCP text.

Matt add a title if you want those to convince employers to allow people to serve in those roles. Even if the role is experimental.

Martin our experiment right now is the triage team. Maybe define follow-ons later.

Spencer to Matt moment of silence during admin plenary to make the ADs less busy need time for busy ADs to make the AD role less busy. After appreciating that irony for a bit, I want to emphasize in this community especially that we are highly reliant on your ideas and efforts on this. We may not be at the leading edge of what we want to do in TSV but need a lot.

David Black I'd like to suggest that as you put the description together for the third TSV AD, put some words in there to explain that they might not be totally peers not equal fractions, all responsible for the same things. That's likely to help more here with the getting a lower time commitment person to run.

Spencer: Stephen Farrell's suggestion for a seven-person IESG is called "smallerizing". We could end up with seven responsibilities, staffed differently in different areas as is appropriate, the way we moved the RFC Editor role from Jon Postel to the entire RFC Series Editor, the production center, and all the other moving parts.

Martin experienced AD hanging around would help with that.

Aaron thinks equipment vendors benefit from experience of an AD. Not many companies make money from TSV, therefore can't make people available. For a long time the TSV AD came from academia and interest in TSV research has gone up and down.

US not much. EU better but funding for AD hard. Long rant, kept brief there's been so much benefit to world community from a well-functioning Internet fund the position.

ICANN, ISOC? A lot of companies are benefiting. Many qualified people in academia can't take the current AD role at anything like full-time. Can't use to get tenure. After whining about this for many years, there's been some movement on the topic. If some person could benefit from some money, ISOC could make this available. Many of the candidates from academia have wandered away . Outreach task needed. [p.a] People in this room who are plugged into the research community, spread this word.

Martin like me, half of the ADs in this room *are* from academia. He cites me as having a fund that companies chip into. Maybe we should pursue this.

Matt does that exist? Someone requested support to Google and it was lost in translation. People at Google didn't want to appear to color the process, because we have so much business in the IETF. We have to have a distance between the funders and the fundee.

David Black strong expectation that people in AD positions serve IETF first and employer second

Mirja as a researcher, you can't spend time, if you don't do research for two years, you can't keep getting funds. Another item: the other way is to reduce the number of documents. Don't discuss now, but the other way to reduce the amount of work is to reduce the number of documents.

Michael Scharf stop working on academic topics and shut down a couple of WGs. We have some examples of working groups that would qualify.

Spencer: well, Pete Resnick DID close down a working group while he was on the stage at plenary. Maybe we all should have.

Slide set: Desired Expertise for TSV ADs

"Yes this is your eye test"

Discussion of the past year's description that Nomcom used to return me for a second term..

Review in detail and comment. Will go to Nomcom more or less as is, but state instead of a 25-40 hour commitment, go with 15-25 hour.

We will only change the time commitment nothing else.

David Black +1 on the time change. Being able to say less than half time is magic. If out of area ADs are working, you can scrub the advice to select people with chair experience in the area, but indicate that out of area ADs make things more flexible. Please add RTG as an area for close interaction.

Allison says make the description more attractive to academics by explaining potential role in IAB programmes, design and architecture - not only upcoming or current protocol stuff. It's more interesting than you're making it sound.

Matt put in the job description that people both be aware of, support, a lot of the dogma around here, but also are prepared to be skeptical. This is critical for evolution of transport. Need to understand why things are the way they are now. Line between blow up everything and changing nothing.

Martin how to say it in the job description. Limited number of people from TSV step forward to volunteer to serve on the Nomcom. There were no TSV people on the last Nomcom.

Briscoe profound thought by Matt. Mundane point on my part: we're moving into a new phase where there's pressure for fast acceleration, more open loop control, interaction of traffic and network. Other areas (routing etc) very interested in AQM not just layering. This needs to be in the description.

Jana I agree with Matt very much.The existing description mentions congestion four or five times. Also emphasize cross-area topics - traffic related, transport and security, transport and applications.

Allison Nomcom usually looks for IETF WG chair experience. Suggest that it be explicit that the chair experience, process experience is not needed for all, because 3 etc.

Spencer asked about comparison to slate in IAB. Allison said that the 3 person areas should ask to be treated as slates, and possibly all, or more considerations.

Gorry - Emphasize to outside world the long-range interests and exciting parts for TSV, not just congestion and PMTU-D - not just the nuts and bolts. Over several years, excitement. Create a page of grand challenges, populate from WG chairs etc.

Aaron This is the best discussion I've heard in years. Is someone writing down Allison's thoughts (since she's the note-taker)? I served on the newarch project. Seek counsel on when rules are changing in arch

Martin The update we did after Orlando was about ADs not have to know all details but no how to consult others for expertise.

Aaron I have a longstanding objection to the random selection of the nomcom voting members. We should have representation. Be sure we have people who understand the needs of TSV on Nomcom.

Jana Gorry said something that needs to be amplified. There's leadership and also imagination. WGs have the experts, and directorate can provide expertise, but the leaders have to lead, have vision. Let the description show this. For academics they have to get funding and other incentives, or it won't work. You must offer them alternatives.

Brian Trammell I'm from the IAB and I'm here to help (laugher). As a pseudo-academic, I convinced my department that RFCs count as pubs. The DOIs will help in "bibliometrically focused" cases.

Jana NSF, EU agencies could they fund these positions. That would go a long way. [What about a group funding by multiple countries]

Brian Trammell is there anything about the interactions of TSV and areas that could come through a programme. Stack Evolution programme (Brian is lead) packed with TSV geeks. To the extent there's an ability to interplay more between ADs and the programme (don't know how it will shape) very open to talking about it.

Spencer to uplevel a tiny bit from that, I went on to IAB in 2010, and the programme structure is less than 5 years old. Stack Evolution is less than 1 year. A magic moment arrives when you realize that the responsible adult that you're relying on is actually you. Thinking about how we can improve, things may be different from how we have been doing things in last 10 years. IETF fans should note that in first 10 years, the structure changed pretty much every year. We created RAI 8 years ago. It was long time before that that a new area had been created. Structural changes were rare, now they have become more frequent.

We don't have to keep things as is. If we have third AD, we'll be third area to get one - RTG, ART and then us. We have no idea how having three ADs works in practice yet. Opens up things. [Allison noted that TSV was second area to get two ADs, as well].

Brian T: at risk of sounding riskless, breaking things and rebuilding is good. We need to deossify the process stack if we're going to deossify the protocol stack.

Michael Scharf in my WG, I often have to say no to academics. I work in industry. We

know TSV has always been a little bit in front. Don't go for academics

[Allison aside: pseudoacademics]. IETF is an industrial standards organization and it is not about research.

Martin point well taken. Ideas of the academic will not be the thing.

Michael not a typical role of an academic to say no to all those other academics.

Spencer RFC 7418 describes RGs and quotes Dave Clark as saying: if it has to work when you are finished, you're not an RG"

Colin perhaps I'm not a very good academic, but I find academic people are good at saying no to my ideas. Encouraging diverse ideas would be good. We don't want to have instant practical stuff and point solutions. Many good points were made about funding academics etc. A word I didn't hear mentioned was IMPACT. (Yes). Academics want both to publish ideas and to have impact of their research and so do their funders.

[Allison aside: tenured faculty getting funds...impact is crucial.]

Pure management roles, or WG chairs roles with a lot of impact, perhaps less apt for academics, but even the chair roles etc.

Mirja tell academic meetings about IETF and get them excited about here so as to include in their

There's often no direct impact into one product from TSV work so the industry standards role is a bit different than elsewhere.

Aaron it's the end of the day on Friday and we've now opened up a bottomless rathole. I can't disagree more about engineering and industry standards. I think Michael S overstated his point. If you think academics can't say no, I'd like to introduce you to my friend Joe Touch.

Michael impact, making money.

Mirja "keeping the Internet alive!".

Spencer with Martin, this is the plan: revise description, ask Nomcom to evaluate a slate, result will probably be 3 ADs. This isn't the last conversation on the broad topics like how we organize things. Discuss on TSVAREA mailing list. We have a lot of work to do, and this is work that matters. Being TSV AD has been nothing like I expected and it's been a real privilege to be your AD for my first term and as much of my second term as until I get recalled. Thanks for being here, and see you in Prague ...