TSVAREA@IETF114
25th July 2022

Martin Duke and
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This session is being recorded
Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF’s patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
IETF 114 Meeting Tips

In-person participants

- Make sure to sign into the session using the Meetecho (usually the “Meetecho lite” client) from the Datatracker agenda
- Use Meetecho to join the mic queue
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- Wear masks unless actively speaking at the microphone.

Remote participants

- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is strongly recommended
Resources for IETF 114 Philadelphia

- Agenda
  [https://datatracker.ietf.org/meeting/agenda](https://datatracker.ietf.org/meeting/agenda)
- Meetecho and other information:
  [https://www.ietf.org/how/meetings/114/preparation](https://www.ietf.org/how/meetings/114/preparation)
- If you need technical assistance, see the Reporting Issues page:
Agenda - July 25 Philadelphia

Administrivia - TSV ADs (10 minutes)
- Session Recorded, Note Well, Blue Sheets, Jabber Scribes, Agenda Bashing
- TSV Overview and State of the Area
- Announcements: side meetings

Open mic (10 minutes)

Congestion Control Working Group Discussion (40 minutes)
Current TSV Working Groups - update

- **ALTO** - All previous chartered items delivered to RFC Editor; focus on YANG and HTTP/2,3
- **DTN** - DTN management architecture is progressing, discussions happening for naming and addressing
- **IPPM** - IOAM to the RFC Editor
- **MASQUE** - On to CONNECT-IP, early rechartering discussion
- **NFSv4** - Slow progress on the current documents, the WG need to decide the priorities and way forward
- **QUIC** - Greasing, manageability, applicability drafts are in RFC-editor, HTTP/3, QPACK and datagram got published, MP-QUIC progressing, QUICv2 and version negotiation are in AD evaluation.
- **RMCAT** - rtp-cc-feedback will be IETF LC soon.
- **TAPS** - taps-arch, taps-interface, taps-imp drafts are enroute to publication
- **TCPM** - AccECN wrapping up
- **TSVWG** - L4S is through IETF Last Call! Thanks Wes Eddy. Other DSCP, DCCP, UDP, and SCTP work continues
# TSV Documents since the last IETF meeting

## New to the RFC Editor Queue
- tcpm-rfc793bis
- alto-cost-mode
- masque-h3-datagram
- masque-connect-udp
- quic-bit-grease
- quic-applicability
- quic-manageability

## RFCs Published
- 9114 HTTP/3
- 9197 Data Fields for In Situ Operations, Administration, and Maintenance (IOAM)
- 9198 Advanced Unidirectional Route Assessment (AURA)
- 9204 QPACK: Field Compression for HTTP/3
- 9221 An Unreliable Datagram Extension to QUIC
- 9235 TCP Authentication Option (TCP-AO) Test Vectors
- 9240 An Extension for Application-Layer Traffic Optimization (ALTO): Entity Property Maps
- 9241 Content Delivery Network Interconnection (CDNI) Footprint and Capabilities Advertisement Using Application-Layer Traffic Optimization (ALTO)
- 9260 Stream Control Transmission Protocol

*Pre-113: alto-path-vector, alto-performance-metrics, nfsv4-rpc-tls*
TSV Area Review Team (TSVART) UPDATE

Thank you for serving, and for providing reviews

Bernard Aboba (0)          Jörg Ott (0)
Olivier Bonaventure (1)    Tommy Pauly (1)
David Black (0)            Colin Perkins (0)
Bob Briscoe (0)            Kyle Rose (1)
Spencer Dawkins (1)        Michael Scharf (1)
Wes Eddy (triage) (0)      Joe Touch (1)
Gorry Fairhurst (0)        Brian Trammell (0)
Jana Iyengar (0)           Michael Tüxen (1)
Mirja Kühlewind (1)        Magnus Westerlund (triage) (1)
Nishida Yoshifumi (1)      

through 7/21
Run for Area Director!
Notable Side Meetings

- After OpenSSL (QUIC support) (6pm Today, Philadelphia South)
  https://meet.google.com/caq-xnau-zfp
- iotops (Fri Session II):
  https://datatracker.ietf.org/doc/draft-nichols-tsv-defined-trust-transport/
Congestion Control Working Group

Martin Duke
IETF 114 - Philadelphia, PA
25 July 2022
Why?

- It’s very hard to get documents through the process
  - So no one does
  - Stuff gets deployed at scale without IETF review, then sent to IETF for ratification (if we’re lucky)
  - There is no standard but Reno
- ICCRG isn’t producing documents
- TCP, SCTP, QUIC, DCCP
What?

- Beef up ICCRG
- Charter a new WG
  - Revise the process
  - Be open to standards track proposals
Questions for today

1. Do we agree there’s a problem?
2. Can a WG be a solution? Is the community willing to contribute if there is a IETF WG?
3. What should the WG do?
4. Is the charter right?
Chartered Items

52 A separate working group can review some of the impediments to early congestion
53 control work occurring in the IETF, and generalize transport in this area from
54 TCP to all the relevant transport protocols. Accordingly, CCLR is chartered to
55 do the following work:
56
57 * Conduct a review of RFC5033 and consider a revision that relaxes requirements
58 to encourage more experiments in the IRTF/IETF. Coordinate with ICCRG to
59 determine a proper division of labor between IRTF stream and IETF stream
60 documents. For adoption of standards-track work, there should be a high bar
61 regarding intent to deploy by major transport implementations.
62
63 * Devise a framework for specifying congestion controls agnostic to protocol. It
64 might establish norms for when protocol-specific considerations are minor enough
65 to include in the base document, or protocol-specific documents are needed.
66
67 * TCPM will soon publish CUBIC as a TCP Proposed Standard. Apply the framework
68 above to adapt this specification to SCTP, QUIC, and DCCP.
Also In Scope

* New algorithms mature enough for standardization. CCLR may consider not only the open internet, but also algorithms focused on Data Centers, “Controlled environments”, Multipath, and Internet of Things use cases. Any adopted document must be clear about the domains to which its operation is restricted. Maturity can be judged on empirical evidence that the algorithm is safe and beneficial to endpoints, as well as stated intent from stakeholders to deploy the algorithm at scale.

* Tweaks to existing algorithms, such as Slow Start.

* New ways for endpoint to respond to both implicit and explicit congestion signals.

* Progression of existing Informational or Experimental RFCs to higher maturity, if they meet the criteria.

Proposals that depend on the capabilities of a single transport protocol should generally remain in the working group for that protocol (i.e. TCPM, QUIC, TSVWG).
Charter Issues

https://github.com/martinduke/congestion-control-charter/issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
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<tbody>
<tr>
<td>Add AQM</td>
<td>#4 opened 15 days ago by martinduke</td>
</tr>
<tr>
<td>Name and Shame</td>
<td>#3 opened 15 days ago by martinduke</td>
</tr>
<tr>
<td>Include RMCAT</td>
<td>#2 opened 15 days ago by martinduke</td>
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<tr>
<td>What does adapt CUBIC to other transports mean?</td>
<td>#1 opened 20 days ago by LPardue</td>
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