TSVAREA@IETF114

25th July 2022

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IETF 114 Philadelphia hosted by



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Note Well

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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)
- https://www.ietf.org/privacy-policy/(Privacy Policy)



This session is being recorded

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In-person participants

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- 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
- Meetecho and other information: <u>https://www.ietf.org/how/meetings/114/preparation</u>
- If you need technical assistance, see the Reporting Issues page: http://www.ietf.org/how/meetings/issues/

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)

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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

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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)

Olivier Bonaventure (1)

David Black (0)

Bob Briscoe (0)

Spencer Dawkins (1)

Wes Eddy (triage) (0)

Gorry Fairhurst (0)

Jana lyengar (0)

Mirja Kühlewind (1)

Nishida Yoshifumi (1)

Jörg Ott (0)

Tommy Pauly (1)

Colin Perkins (0)

Kyle Rose (1)

Michael Scharf (1)

Joe Touch (1)

Brian Trammell (0)

Michael Tüxen (1)

Magnus Westerlund (triage) (1)

through 7/21

Run for Area Director!

Notable Side Meetings

- After OpenSSL (QUIC support) (6pm Today, Philadelphia South)
 https://meet.google.com/cag-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

- 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

```
A separate working group can review some of the impediments to early congestion
    control work occurring in the IETF, and generalize transport in this area from
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    TCP to all the relevant transport protocols. Accordingly, CCLR is chartered to
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    do the following work:
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    * Conduct a review of RFC5033 and consider a revision that relaxes requirements
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    to encourage more experiments in the IRTF/IETF. Coordinate with ICCRG to
    determine a proper division of labor between IRTF stream and IETF stream
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    documents. For adoption of standards-track work, there should be a high bar
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    regarding intent to deploy by major transport implementations.
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62
    * Devise a framework for specifying congestion controls agnostic to protocol. It
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    might establish norms for when protocol-specific considerations are minor enough
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    to include in the base document, or protocol-specific documents are needed.
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66
    * TCPM will soon publish CUBIC as a TCP Proposed Standard, Apply the framework
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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
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     the open internet, but also algorithms focused on Data Centers, "Controlled
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     environments", Multipath, and Internet of Things use cases. Any adopted
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     document must be clear about the domains to which its operation is restricted.
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     Maturity can be judged on empirical evidence that the algorithm is safe and
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     beneficial to endpoints, as well as stated intent from stakeholders to deploy
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84
     the algorithm at scale.
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     * Tweaks to existing algorithms, such as Slow Start.
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     * New ways for endpoint to respond to both implicit and explicit congestion
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     signals.
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     * Progression of existing Informational or Experimental RFCs to higher maturity,
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    if they meet the criteria.
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     Proposals that depend on the capabilities of a single transport protocol should
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     generally remain in the working group for that protocol (i.e., TCPM, QUIC,
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     TSVWG).
0.7
```

Charter Issues

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

	0	Add AQM #4 opened 15 days ago by martinduke
	0	Name and Shame #3 opened 15 days ago by martinduke
	0	Include RMCAT #2 opened 15 days ago by martinduke
	0	What does adapt CUBIC to other transports mean? #1 opened 20 days ago by LPardue