

# TSVWG

## IETF-105 (Montreal)

25<sup>th</sup> & 26<sup>th</sup> July 2019

Gorry Fairhurst  
Wes Eddy (remote)  
David Black  
WG chairs

# 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.

As a reminder:

By participating in the IETF, you agree to follow IETF processes and policies.

If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.

As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.

Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.

As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<https://www.ietf.org/contact/ombudsteam/>) if you have questions or concerns about this.

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)



**I E T F**

# HELP TSVWG!

- We have a Notetakers:
  - (Theresa E.Thursday; Michael S. Friday)
- We need a scribe for Jabber session
  
- Future TSVWG Authors:  
PLEASE add “-tsvwg-” to any ID submitted

# Document Review Request

- Document quality relies on reviews, please review documents in your working group and at least one other document from another working group.
- If you'd like documents that you care about reviewed, please put the effort in to review other documents.

# TSVWG Accomplishments and Status

- 1 RFC published since IETF 104
  - A Lower-Effort Per-Hop Behavior (LE PHB) for Differentiated Services (RFC 8622)
- 4 Internet-Drafts (IDs) in RFC Editor Queue:
  - FEC Framework Extension
  - FEC Sliding Window Random Linear Code
  - TinyMT32 Pseudo Random Number Generator
  - DiffServ and Web RTC QoS
    - RFC Ed. State: MISSREF [several WebRTC drafts]
    - Part of the (in)famous WebRTC cluster 238

# TSVWG Accomplishments and Status

- No IDs at IESG
- 2 IDs with WG chairs & authors after WGLC
  - ECN Encapsulation for Lower Layer Protocols
  - ECN for Tunnels that use Shim Headers
    - New fragmentation interaction text being reviewed

# TSVWG Accomplishments and Status

- No IDs in WG Last Call
- 2 IDs likely to go to WG Last Call soon
  - Transport Header Confidentiality Impacts
  - Datagram PL Path MTU Discovery
- Next steps for L4S drafts will be discussed on Friday

# TSVWG Accomplishments and Status

- Additional Working Group IDs (6)
  - 1) SCTP (RFC 4960bis)
  - 2) L4S Architecture
  - 3) L4S Identifier (ECN)
  - 4) L4S AQM (dualq-coupled)
  - 5) UDP Options
  - 6) Tunnel Congestion Feedback



# TSVWG: Related Drafts

- Transport-related:
  - IPV6 Path MTU Discovery
    - draft-hinden-6man-mtu-option
  - IPv6 Reservation Protocol
    - draft-han-tsvwg-ip-transport-qos
  - L4S and Diffserv
    - draft-briscoe-tsvwg-l4s-diffserv
  - LOOPS (Localized Optimization of Path Segments) [BOF was on Monday]
    - draft-li-tsvwg-loops-problem-opportunities
    - draft-welzl-loops-gen-info

# TSVWG: Related Drafts (2)

- Transport-related (continued):
  - ECN and NSH  
(Related to Tunnel Congestion Feedback draft)
    - draft-ietf-sfc-nsh-ecn-support
  - Low Latency DOCSIS
    - draft-white-tsvwg-ld
    - draft-briscoe-docsis-q-protection
  - Loss-Latency Tradeoff for Mobile Networks
    - draft-fossati-tsvwg-lola
- Internet-related (intarea WG):
  - Tunnel MTU Considerations
    - draft-ietf-intarea-tunnels
  - Fragmentation Fragility
    - draft-ietf-intarea-frag-fragile
  - SOCKS Protocol Version 6
    - draft-olteanu-intarea-socks-6

# TSVWG: Related Drafts (3)

- SCTP
  - Multipath
    - draft-tuexen-tsvwg-sctp-multipath
  - Retransmission
    - draft-jovev-tsvwg-sctp-rto

# TSVWG Agenda

## **Chairs Agenda Bashing**

NOTE WELL

## **Thursday's Agenda**

Document Accomplishments and Status

Milestones Review

Drafts (including UDP Options)

## **Friday's Agenda**

More Drafts (including L4S and SCE)

# WG Milestones Review (1)

- **Feb 2019**      **Submit 'Guidelines for Adding Congestion Notification to Protocols that Encapsulate IP' as a BCP RFC**
- **Feb 2019**      **Submit 'Propagating Explicit Congestion Notification Across IP Tunnel Headers Separated by a Shim as a Proposed Standard RFC**  
**(2<sup>nd</sup> WGLC completed, both drafts are with WG chairs)**
- **Jun 2019**      **Submit "Low Latency, Low Loss, Scalable Throughput (L4S) Internet Service: Architecture" as an Informational RFC**
- **Jun 2019**      **Submit "DualQ Coupled AQM for Low Latency, Low Loss and Scalable Throughput" as an Experimental RFC**
- **Jun 2019**      **Submit "Identifying Modified Explicit Congestion Notification (ECN) Semantics for Ultra-Low Queuing Delay" as an Experimental RFC**  
**(L4S drafts - next step discussions on Friday)**

# WG Milestones Review (2)

- **Jul 2019**      **Submit 'SCTP NAT Support' to IESG as a Proposed Standard RFC**
- **Aug 2019**      **Submit 'Packetization Layer Path MTU Discovery for Datagram Transports' as a Proposed Standard RFC**
- **Sep 2019**      **Submit “The Impact of Transport Header Confidentiality on Network Operation and Evolution of the Internet” as an Informational RFC**  
**(Above 3 dates are aggressive – Sep/Oct/Oct is realistic, expect WGLC on all 3 drafts before next IETF meeting)**
- **Dec 2019**      **Submit “SCTP” (rfc4960bis) as a Proposed Standard RFC**
- **Apr 2020**      **Submit “Tunnel Congestion Feedback” as an Informational RFC**
- **Jun 2020**      **Submit "Transport Options for UDP" as a Proposed Standard RFC**

# Agenda for Thursday (part 1)

- 1) Document Status, Charter and Accomplishments
  - WG drafts, Related drafts, Milestones
- 2) Agenda Bashing and SOCKS update
- 3.\*) Transport Encryption
  - Transport Header Encryption Impacts
    - draft-ietf-tsvwg-transport-encrypt
  - Loss Signaling for Encrypted Protocols
    - draft-ferrieuxhamchaoui-tsvwg-lossbits
- 3.\*) SCTP Drafts
  - Updated SCTP spec (draft-ietf-tsvwg-rfc4960-bis)
  - SCTP NAT support (draft-ietf-tsvwg-natsupp)
  - Retransmission (draft-proshin-tsvwg-sctp-rtx-bit)

# Agenda for Thursday (part 2)

## 3.\*) Additional WG Drafts

- Datagram PL Path MTU Discovery
  - draft-ietf-tsvwg-datagram-plpmtud
- UDP Options
  - draft-ietf-tsvwg-udp-options

## 4) New Work

- QoS Management (YANG)
  - draft-asechoud-rtgwg-qos-model
  - draft-asechoud-rtgwg-qos-oper-model
- QCI and Diffserv (mobile data QoS)
  - draft-henry-tsvwg-diffserv-to-qci
- Non-Queue-Building Flows
  - Draft-white-tsvwg-nqb



# Agenda for Friday (part 1)

## 5) L4S (Low Latency Low Loss Scalable)

- Readiness for WGLC
- Drafts Update
  - draft-ietf-tsvwg-l4s-arch
  - draft-ietf-tsvwg-ecn-l4s-id
  - draft-ietf-tsvwg-aqm-dualq-coupled
- Transports for L4S

## 6.1) SCE (Some Congestion Experienced)

- draft-morton-tsvwg-sce
- draft-heist-tsvwg-sce-one-and-two-flow-tests
- draft-grimes-tcpm-tcpsce

# Agenda for Friday (part 2)

## 6.2) DCCP Multipath

- draft-amend-tsvwg-dccp-udp-header-conversion
- draft-amend-tsvwg-multipath-dccp
- draft-amend-tsvwg-multipath-framework-mpdccp

## 6.3) Any other items?