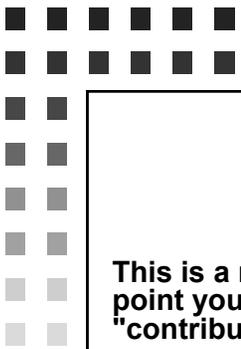# TSVWG
IETF-103 (Bangkok)

5th & 7th November 2018

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.

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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)

I E T F
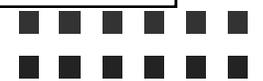
HELP TSVWG!

- Need a Note Taker
- Need a scribe for Jabber session
- Need reviewers for WG drafts

- 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 start of IETF 102
  - DSCP IANA Process Changes (RFC 8436)

- 1 Internet-Draft (ID) in RFC Editor Queue:
  - DiffServ and Web RTC QoS
    - RFC Ed. State: MISSREF [several WebRTC drafts]
    - Part of the (in)famous cluster 238
      - https://www.rfc-editor.org/cluster_info.php?cid=C238

TSVWG Accomplishments and Status

- 3 IDs at IESG
  - SCTP (RFC 4960) Errata and Issues
    - Update later in this meeting
  - FEC Framework Extension
    - Approved, minor edits needed, then waits for …
  - FEC Sliding Window Random Linear Code
    - AD Discuss positions: Security, source code and source code copyright

- 1 ID with WG chairs & authors after WGLC
  - Diffserv Lower Effort PHB
    - RFC Publication request will be submitted this week

TSVWG Accomplishments and Status

- No IDs in WG Last Call

- 2 IDs likely to go to 2nd WG Last Call soon
  - ECN Encapsulation for Lower Layer Protocols
  - ECN for Tunnels that use Shim Headers
    - Above two drafts will be WG Last Called together
    - Need more reviews next time around

TSVWG Accomplishments and Status

- Additional Working Group IDs (8)
    1) SCTP NAT Support
    2) L4S Architecture
    3) L4S Identifier (ECN)
    4) L4S AQM (dualq-coupled)
    5) UDP Options
    6) Tunnel Congestion Feedback (draft expired)
    7) Datagram PL Path MTU Discovery
    8) Transport Header Confidentiality Impacts

TSVWG: Related Drafts

- Transport-related:
  - IPV6 Path MTU Discovery
    - draft-leddy-6man-truncate
    - draft-troan-6man-pmtu-solution-space (on Wed. tsvwg agenda)
    - draft-hinden-6man-mtu-option
  - TCP Encapsulation Considerations
    - draft-pauly-tcp-encapsulation
  - IPv6 Reservation Protocol
    - draft-han-tsvwg-ip-transport-qos
  - Priority Switching Scheduler
    - draft-finzi-priority-switching-scheduler
      (ISE publication will be requested)
  - Overlay Forwarding Behavior
    - draft-li-tsvwg-overlayed-path-segment-fwding (on Wed. tsvwg agenda)
  - Passive RTT measurement
    - draft-trammell-tsvwg-spin

TSVWG: Related Drafts (2)

- Transport-related (sfc WG):
  - ECN and NSH
    (Related to Tunnel Congestion Feedback draft)

    draft-eastlake-sfc-nsh-ecn-support
- 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 Agenda

Chairs Agenda Bashing
  NOTE WELL

Monday's Agenda
  Document Accomplishments and Status
  Milestones Review
  Drafts

Wednesday's Agenda
  More Drafts

WG Milestones Review (1)

- **Aug 2018** — **Submit 'A Lower Effort Per-Hop Behavior (LE PHB)' as a Proposed Standard RFC**
  (Will be completed this week)

- **Sep 2018** — **Submit "Low Latency, Low Loss, Scalable Throughput (L4S) Internet Service: Architecture" as an Informational RFC**

- **Sep 2018** — **Submit "DualQ Coupled AQM for Low Latency, Low Loss and Scalable Throughput" as an Experimental RFC**

- **Sep 2018** — **Submit "Identifying Modified Explicit Congestion Notification (ECN) Semantics for Ultra-Low Queuing Delay" as an Experimental RFC**
  (Too soon – move all three L4S dates to June 2019)

- **Oct 2018** — **Submit 'Guidelines for Adding Congestion Notification to Protocols that Encapsulate IP' as a BCP RFC**

- **Oct 2018** — **Submit 'Propagating Explicit Congestion Notification Across IP Tunnel Headers Separated by a Shim as a Proposed Standard RFC**
  (WGLC needs to be repeated, move dates to Feb 2019)

WG Milestones Review (2)

- **Oct 2018**   **Submit 'SCTP NAT Support' to IESG as a Proposed Standard RFC**

  (Delayed by SCTP Errata adventure, move to April 2019)

- **Dec 2018**   **Submit "Transport Options for UDP" as a Proposed Standard RFC**
  (Dec 2018 won't happen, move to February 2019)

- **Dec 2018**   **Submit 'Packetization Layer Path MTU Discovery for Datagram Transports' as a Proposed Standard RFC**
  (Dec 2018 won't happen, move to August 2019)

- **Dec 2018**   **Submit "Tunnel Congestion Feedback" as an Informational RFC**
  (Tunnel Congestion Feedback unlikely to be done soon, adjust date in Bangkok, April 2020?)

- **Dec 2019**   **Submit "SCTP" (rfc4960bis) as a Proposed Standard RFC**

- **Need new milestone: Submit "The Impact of Transport Header Confidentiality on Network Operation and Evolution of the Internet" as an Informational RFC (suggest September 2019)**

Agenda for Monday (part 1)

1) Document Status, Charter and Accomplishments
  – WG drafts, Related drafts, Milestones
  – Errata reminder: RFC 8311 (ECN Experimentation)
    • IANA Consideration: ECT(1) is for experimental use only
2) Agenda Bashing and Hackathon update
3) Transport and Network drafts
  – Transport Header Encryption Impacts
    • draft-ietf-tsvwg-transport-encrypt
  – FEC drafts (at IESG)
    • draft-ietf-tsvwg-fecframe-ext
    • draft-ietf-tsvwg-rlc-fec-scheme (IESG Discuss items)

Agenda for Monday (part 2)

3) Transport and Network drafts (continued)

- L4S drafts
  (includes out-of-order forwarding discussion)
  - draft-ietf-tsvwg-l4s-arch
  - draft-ietf-tsvwg-ecn-l4s-id
  - draft-ietf-tsvwg-dualq-coupled
  - (L4S and Diffserv draft - see next slide)
- QUIC and ECN update
  - Related: Tuesday TCPM session (11:20 – 12:20) is entirely devoted to congestion control/loss recovery comparison between QUIC & TCP

Agenda for Monday (part 3)

4) New Work on Diffserv (as time permits)
- – Diffserv to QCI Mapping [moved to Wed.]
  - • draft-henry-tsvwg-diffserv-to-qci
- – Non Queue Building Flows
  - • draft-white-tsvwg-nqb
- – L4S and Diffserv [skipped]
  - • draft-briscoe-tsvwg-l4s-diffserv

Agenda for Wednesday (part 1)

5) Transport Protocols and Mechanisms
- UDP Options
  - draft-ietf-tsvwg-udp-options
  - draft-fairhurst-udp-options-cco
- SCTP Drafts
  - draft-ietf-tsvwg-natsupp
  - draft-ietf-tsvwg-rfc4960-errata (update)
  - Plans for rfc4960bis
- Datagram PL Path MTU Discovery
  - draft-ietf-tsvwg-datagram-plpmtud
- IPv6 Path MTU Discovery
  - draft-troan-6man-pmtu-solution-space

Agenda for Wednesday (part 2)

6) New Work (if time permits)

– Overlay Forwarding Behavior [moved to Mon.] (problem statement)

• draft-li-tsvwg-overlayed-path-segment-fwding

Related Event: IEEE 802/IETF Data Center Workshop

Saturday, November 10, 13:30 – 17:30

- Marriott Queen's Park, Bangkok (this hotel)
- No fee, but registration is required

Agenda includes some congestion topics

Details: https://1.ieee802.org/802-nendica/802-ietf-workshop-data-center-bangkok/