

TCP Maintenance and Minor Extensions (TCPM) Working Group

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Note Well

This summary is only meant to point you in the right direction, and doesn't have all the nuances. The IETF's IPR Policy is set forth in BCP 79; please read it carefully.

The brief summary:

- ❖ **By participating with the IETF, you agree to follow IETF processes.**
- ❖ **If you are aware that a contribution of yours (something you write, say, or discuss in any IETF context) is covered by patents or patent applications, you need to disclose that fact.**
- ❖ **You understand that meetings might be recorded, broadcast, and publicly archived.**

For further information, talk to a chair, ask an Area Director, or review the following:

BCP 9 (on the Internet Standards Process)

BCP 25 (on the Working Group processes)

BCP 78 (on the IETF Trust)

BCP 79 (on Intellectual Property Rights in the IETF)

Logistics

- Note taker
- Jabber
- Please include "-tcpm-" in draft names
- Please say your name at the mike

Agenda

- Agenda bash and WG status (10 min)
- Working group items
 - Gorrry Fairhurst: draft-ietf-tcpm-newcwv (10 min)
 - Anna Brunstrom: draft-ietf-tcpm-rtoreset (10 min)
 - Richard Scheffenegger: draft-ietf-tcpm-undeployed (5 min)
 - Wesley Eddy: draft-ietf-tcpm-tcp-edo (10 min)
- Individual drafts
 - Wesley Eddy: draft-eddy-rfc793bis (20 min)
 - David Borman: draft-borman-tcpm-tcp4way (20 min)
 - Brian Weis: draft-nayak-tcp-sha2 (20 min)

Rechartering

Charter Update

- One additional sentence:

TCPM also provides a venue for standardization of incremental enhancements of TCP's standard congestion control. **In addition, TCPM may document alternative TCP congestion control algorithms that are known to be widely deployed, and that are considered safe for large-scale deployment in the Internet.** Changes of algorithms may require additional review by the IRTF Congestion Control Research Group (ICCRG). Fundamental changes to TCP or its congestion control algorithms (e.g., departure from loss-based congestion control) will be handled by other working groups or will require rechartering.

- Full text: <https://datatracker.ietf.org/wg/tcpm/charter/>

Status of Documents

Recent RFCs

- RFC 7413 (draft-ietf-tcpm-fastopen)
- RFC 7414 (draft-ietf-tcpm-tcp-rfc4614bis)

WG Documents (Post WGLC)

- draft-ietf-tcpm-accecn-reqs
 - Submitted to IESG for Publication - writeup needed

WG Documents (Active)

- draft-ietf-tcpm-newcwv
 - Will be presented in the meeting
 - Ongoing WGLC until March 25
- draft-ietf-tcpm-rto-restart
 - Will be presented in the meeting
 - Ready for WGLC?

WG Documents (Active)

- draft-ietf-tcpm-undeployed
 - Will be presented in the meeting
 - Ready for WGLC?
- draft-ietf-tcpm-tcp-edo
 - Will be presented in the meeting
 - SYNs are explicitly not in scope
 - Status (PS or EXP) to be determined
 - Reviews and feedback wanted

Selected non-WG Documents

- draft-eddy-rfc793bis
 - Will be presented in the meeting
 - Ready for WG adoption?
- Ongoing discussion on long options (including SYN)
 - draft-borman-tcpm-tcp4way will be presented in the meeting
 - Other drafts include draft-briscoe-tcpm-inspace-mode-tcpbis, draft-touch-tcpm-tcp-syn-ext-opt, and draft-leslie-tcpm-checksum-option
 - No clear consensus
 - Further discussion needed (later)

Selected non-WG Documents

- draft-nayak-tcp-sha2
 - Will be presented in the meeting
 - Feedback wanted, possibly also from SEC-DIR
- draft-zimmermann-tcpm-cubic
 - Strong support for adoption during IETF 91
 - Awaiting charter update for adoption call
- Many ongoing list discussions
 - Several active drafts related to TCPM
 - See <https://datatracker.ietf.org/wg/tcpm/documents/>

Backup Slides

Option Extension Discussion

- Solution for non-SYNs
 - Is the current solution in draft-ietf-tcpm-tcp-edo indeed robust enough?
 - Additional corruption protection, e.g., draft-leslie-tcpm-checksum-option?
 - Encoding alternatives, e.g., parts of draft-briscoe-tcpm-inspace-mode-tcpbis?
- Various proposals for SYNs
 - Out-of-band segment, i.e., draft-touch-tcpm-tcp-syn-ext-opt
 - Dual SYN, i.e., parts of draft-briscoe-tcpm-inspace-mode-tcpbis
 - Handshake extension, i.e., draft-borman-tcpm-tcp4way
 - Other related discussions (SPUD BoF, HOPS BarBoF, QUIC, ...)
- Short-term focus: non-SYN
 - Useful e.g. for SACK
 - Avoid ad-hoc solutions (e.g., in TCPINC)
- **Wanted: Implementations, experiments, feedback**
 - Informational RFC?
 - But (lack of) data should not prevent us from moving forward
- TCPM may not be the right place to develop "NextGen-TCP"