

TCB Control Block Sharing: 2140bis

draft-touch-tcpm-2140bis-05

IETF 108 - Online



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Changes from -03

- Minor typos and clarifications
 - Notes about TCP option interactions with TCB sharing
 - Table reformatting
 - Updates to internal cross references
 - Extended terminology list
- No core changes
- WG LC (May 30 – June 14)
 - Request to add informational reference on implementation (**pending**)

Post WG LC comments

- 6/19 Request to expand security considerations
 - Request to restore discussion of sharing application-specific settings
 - Removed in -02: “For example, an application can open a connection and set its window size to zero, denying service to any other subsequent connection between those hosts.”
 - User/app-set values aren’t in the list of what can be shared anyway
 - Will add a sentence about “not sharing user/app-set values” just in case (and why) (pending – see next slide)
 - Request to address linkability (stated as “likeability”)
 - Not clarified
- 6/19 Query about Appendix C
 - Introduced in Nov 2019 with no other comments since
 - Content declined for stand-alone WG adoption due to lack of parameter specifics
 - Presentation is consistent with the general advice of 2140bis
 - Appendix in whole provides needed context and detail
- 6/25 Query about TFO note
 - Introduced Sept 2018
 - Addresses how idle connections affect shared state
 - Intended to help TFO from avoiding bursting, per Sec 7.2 of RFC 7413.
 - Update provided to text (pending – see next slide)

Was-Is (pending changes)

- Security considerations
 - IS: "Some TCB values are under direct user (application) control. Such values MUST NOT be shared because sharing would present an opportunity to circumvent security boundary protections that isolate applications from directly interfering with each other. Only values that are computed based on actual behavior should be considered sharable."
- TFO
 - WAS: "Because this is similar to the case when a connection becomes idle, mechanisms that address idle TCP connections (e.g., [RFC7661]) could also be applied to TCB cache management, especially when TCP Fast Open is used [RFC7413]"
 - IS: "Because this is similar to the case when a connection becomes idle, mechanisms that address idle TCP connections (e.g., [RFC7661]) could also be applied to TCB cache management such as TCP Fast Open [RFC7413] (Section 7.2)"

Next steps

- -06 to be issued after queue opens
- IETF LC ?