

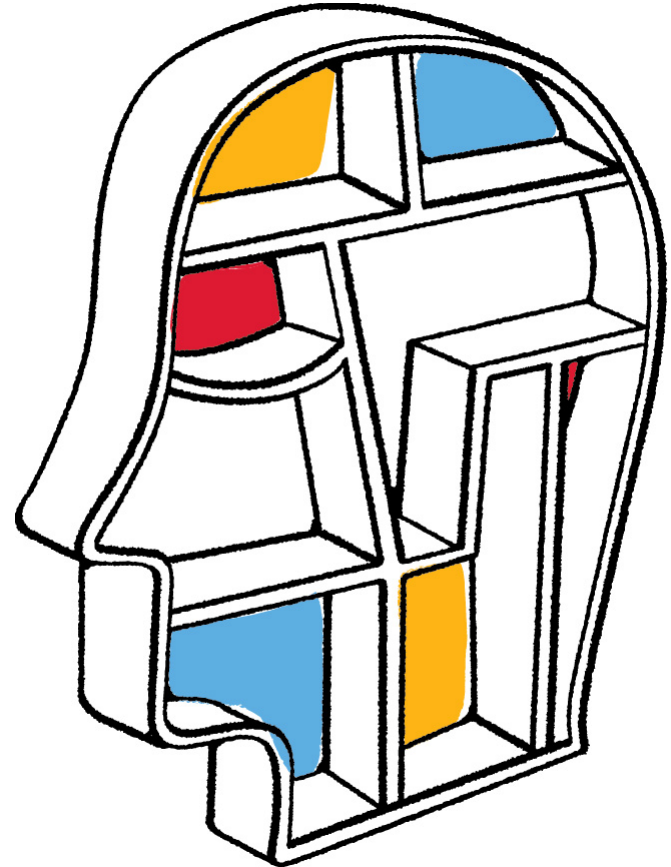
RFC1323bis – TCP Extensions for High Performance

Richard Scheffenegger (Editor)

David Borman

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RFC1323bis – since IETF84

- Only one new comment
 - security implications of TS
- Discussed open points at IETF84
 - no change of text

Open in draft-ietf-tcpm-1323bis-03

- Finalize RFC2119 BCP wording
- Reviews of full document

Changes since draft-ietf-tcpm-1323bis-01

- Changed format from noff to xml2rfc
 - addressed some nits around indentation
 - new citation and TOC style
 - removed references to historic RFC1072
 - Caret ^ instead of C-style ** for exponential notation

Changes since draft-ietf-tcpm-1323bis-01

- Content:

- Window Scale (WS):

- sec 2.4 window retraction – M. Mathis

- Timestamp (TS):

- sec 3.2 removed text to allow potential in-session negotiation of TS – M. Mathis
- sec. 3.3 explicitly excluding ACKs with selective acknowledgements (SACK) for round trip-time measurement (RTTM) processing – R. Scheffenegger

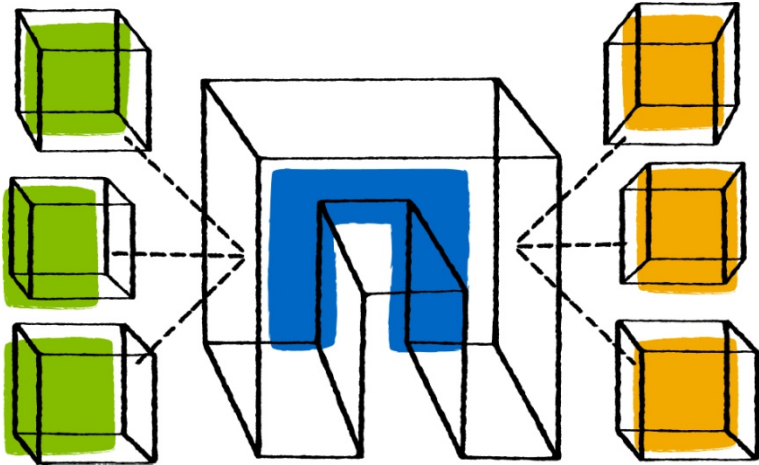
- Lots of typos and inconsistencies

Thanks to A. Hoenes, A. Zimmermann

Thank you



Backup



Window Scale Retraction

- Expanded text to dedicated section 2.4
- Explicitly quoted section 4.2.2.16 of RFC1122 to describe the expected behavior.

Timestamp negotiation

- Allow late negotiation:

Old:

A TCP may send the Timestamps option (TSopt) in an initial <SYN> segment (i.e., a segment containing a SYN bit and no ACK bit), and may send a TSopt in other segments only if it received a TSopt in the initial <SYN> or <SYN,ACK> segment for the connection.

New:

A TCP may send the Timestamps option (TSopt) in an initial <SYN> segment (i.e., a segment containing a SYN bit and no ACK bit).

Timestamp RTTM processing

- Only reflect timestamp from last in-sequence data packet.
- Only process timestamp when new data is acknowledged.
- However, ACK loss may lead to increased RTT (first ACK in a series of duplicates lost)
- Presence of SACK option indicates that reordering/loss was present at the receiver, sender SHOULD ignore that RTT update.