

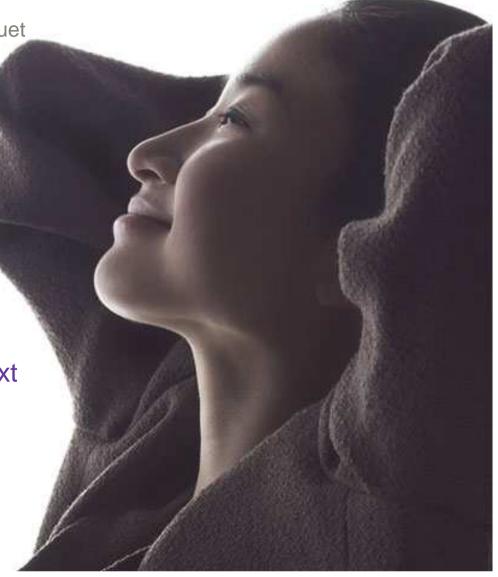
A Test To Allow TCP Senders to Identify Receiver Non-Compliance

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BT PLC

draft-moncaster-tcpm-rcv-cheat-01.txt

Intended for Standards Track?



## **Updated Draft**

### A Test To Allow TCP Senders to Identify Receiver Non-Compliance

Revised Draft: <u>draft-moncaster-tcpm-rcv-cheat-01.txt</u>

Intended Status: Standards Track?

Immediate Intent: Move to WG item

#### Changes from previous version:

- Broadened scope to include rcvr non-compliance (+cheating)
- Clarified that this could be used as part of a TCP test suite
- Added section on interactions with other TCP variants (TCP-secure, Nagle, delayed ACKs)
- Addressed possible impact of additional packet reordering
- Tightened up rules for segment delay in stage 1 test

## Quick reminder of (optional) test process

#### **Stage 1 Test:**

To test if a receiver is compliant with TCP's rules on missing segments:-

- Select segment S and displacement D where 2 < D < K-2,</li>
  K = current window size. D SHOULD be < 6</li>
- Segment S is transmitted after segment S+D
- Receiver should generate D duplicate ACKs

#### **Stage 2 Test:**

If a receiver fails the first test we can perform a tougher test:-

- Select a segment, S. Start a congestion response. Don't transmit S until you receive a dup. ACK for segment S-1
- If you receive an ACK for a segment between S-1 and R, then the receiver fails the test and the connection is closed

# **Next Steps**

- We have responded to all comments received at IETF68 and subsequently on the mailing list
- Still possibility of undesirable interactions with obscure TCP variants – will respond to these as they are suggested
- Would like to propose the draft moves to WG status with new name (dropping the reference to cheating): draft-ietf-tcpm-rcv-comply-test
- We would welcome offers of assistance from co-authors

Note – this optional test is meant to plug an existing hole – future versions of TCP might fill the hole properly (e.g. transport-layer nonce)



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Questions?