

TCPM AD Issues

IETF 118

Recharter

OLD

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.

TCP's congestion control algorithms are the model followed by other IETF transports (e.g., SCTP or DCCP), which are standardized in other working groups, such as the Transport Area WG (tsvwg). In the past, the IETF has worked on several documents about algorithms that are specified for multiple protocols (e.g., TCP and SCTP) in the same document. Which WG shepherds such documents will be determined on a case-by-case basis. In any case, the TCPM WG will remain in close contact with other relevant WGs working on these protocols to ensure openness and stringent review from all angles.

NEW

Congestion control work generally occurs in CCWG or ICCRG. However, TCPM can take on such work in coordination with those groups, especially if it relies on TCP-specific protocol elements.

RFC 3465 (Experimental)

Congestion Avoidance

`cwnd += min (N, SMSS)`



RECOMMENDED in RFC
5681 (PS)

Slow Start

`cwnd = cwnd + min (N,
L * SMSS) [L ≤ 2]`



L	with Hystart++	without Hystart++
1	hystart++ (PS)	RFC 5681 (PS)
2	hystart++ (PS)	RFC 3465 (EXP)
>2	hystart++ (PS)	?????

Options

- Do Nothing
 - perpetuates myths about RFC 3465
- Document action to move RFC 3465 to Historic
 - Best practice for slow start now includes Hystart++
 - Non-hystart++ L=2 implementations now unspecified
- New PS RFC to standardize last bit of RFC 3465
 - Does it matter that many implementations are in this state? (with large L!)
- Roll it into a bigger RFC5681 bis