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The state of implementation of TCP control block interdependence
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Abstract

This document provides an overview of the state of implementation of RFC 2140, in preparation for a possible future RFC2140bis document.

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1. State of Implementation

* L = Linux, F = FreeBSD

Table 1: State of implementation of RFC 2140 in Linux and FreeBSD

RFC 2140	Description	Implementation	Status
Old-MSS	Maximum Segment Size	F:rmx_mtu	This is being cached and shared in FreeBSD.
Old-RTT	Estimated Round-Trip Time	L:TCP_METRIC_RTT F:rmx_rtt	Cached in both FreeBSD and Linux, however it is being used by a new connection in FreeBSD only.
Old-RTT var	Estimated Round-Trip Time	L:TCP_METRIC_RTTVAR F:rmx_rttvar	Cached in both FreeBSD and Linux, however it is being used by a new connection in FreeBSD only.
Old-snd_cwnd	Congestion Window	L:TCP_METRIC_CWND F:rmx_cwnd	Cached in both FreeBSD and Linux, however it is not being used by a new connection.
-	Slow Start Threshold	L:TCP_METRIC_SSTHRESH F:rmx_ssthresh	This is being cached and shared in both FreeBSD and Linux. In Linux, it is set to $\max(\text{cwnd}/2, \text{ssthresh})$ in most cases. In

			FreeBSD, however, it is set to either the current ssthresh if not set previously, or to the arithmetic ssthresh and previously cached metric.
-	Metric related to the extent of reordering.	L:TCP_METRIC_REORDERING	This is being cached and shared in Linux.
-	Estimated Bandwidth	F:rmx_bandwidth	Not in the specification. It is not set before caching when a connection is closed.
-	Outbound Delay - Bandwidth Product	F:rmx_sendpipe	Not in the specification. This is used for socket buffer in FreeBSD. The value is set to 0 before caching when a connection is closed.
-	Inbound Delay-Bandwidth Product	F:rmx_rcvpipe	Not in the specification. This is used for socket buffer in FreeBSD. The value is set to 0 before caching when a connection is closed.

2. IANA Considerations

This memo includes no request to IANA.

3. Security Considerations

To be added

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