TCP Maintenance and Minor Extensions (tcpm)

S. Islam Internet-Draft

Intended status: Informational University of Oslo

J. Touch

USC/ISI

M. Welzl

J. You

Huawei

October 19, 2015

The state of implementation of TCP control block interdependence draft-welzl-tcpm-tcb-sharing-00

Abstract

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

Status of This Memo

Expires: April 21, 2016

This Internet-Draft is submitted in full conformance with the provisions of BCP 78 and BCP 79.

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at http://datatracker.ietf.org/drafts/current/.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on April 21, 2016.

Copyright Notice

Copyright (c) 2015 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents

(http://trustee.ietf.org/license-info) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of

the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

<u>1</u> .	State of Implementation	2
<u>2</u> .	IANA Considerations	3
<u>3</u> .	Security Considerations	3
Auth	ors' Addresses	4

1. State of Implementation

* L = Linux, F = FreeBSD

Table 1: State of implementation of RFC 2140 in Linux and 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 Thresold 	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(cwnd/2, ssthresh) in most cases. In			

Welzl, et al. Expires April 21, 2016 [Page 2]

 	 	 	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_recvpipe 	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

Authors' Addresses

Michael Welzl University of Oslo PO Box 1080 Blindern Oslo N-0316 Norway

Phone: +47 22 85 24 20 Email: michawe@ifi.uio.no

Safiqul Islam University of Oslo PO Box 1080 Blindern Oslo N-0316 Norway

Phone: +47 22 84 08 37 Email: safiquli@ifi.uio.no

Joe Touch USC/ISI 4676 Admiralty Way, Marina del Rey CA 90292-6695 USA

Phone: +1 (310) 448-9151 Email: touch@isi.edu

Jianjie You Huawei 101 Software Avenue, Yuhua District Nanjing 210012 China

Email: youjianjie@huawei.com