

Internet Engineering Task Force (IETF)  
Request for Comments: 6247  
Obsoletes: 1072, 1106, 1110, 1145,  
          1146, 1379, 1644, 1693  
Updates: 4614  
Category: Informational  
ISSN: 2070-1721

L. Eggert  
Nokia  
May 2011

Moving the Undeployed TCP Extensions RFC 1072, RFC 1106,  
RFC 1110, RFC 1145, RFC 1146, RFC 1379, RFC 1644, and RFC 1693 to  
Historic Status

## Abstract

This document reclassifies several TCP extensions that have never seen widespread use to Historic status. The affected RFCs are RFC 1072, RFC 1106, RFC 1110, RFC 1145, RFC 1146, RFC 1379, RFC 1644, and RFC 1693.

## Status of This Memo

This document is not an Internet Standards Track specification; it is published for informational purposes.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Not all documents approved by the IESG are a candidate for any level of Internet Standard; see Section 2 of RFC 5741.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <http://www.rfc-editor.org/info/rfc6247>.

## Copyright Notice

Copyright (c) 2011 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.

## 1. Introduction

TCP has a long history, and several proposed TCP extensions have never seen widespread deployment. Section 5 of the TCP "roadmap" document [RFC4614] already classifies a number of TCP extensions as Historic and describes the reasons for doing so, but it does not instruct the RFC Editor and IANA to change the status of these RFCs in the RFC database and the relevant IANA registries. The sole purpose of this document is to do just that. Please refer to Section 5 of [RFC4614] for justification.

## 2. RFC Editor Considerations

Per this document, the RFC Editor has changed the status of the following RFCs to Historic [RFC2026]:

- o [RFC1072] on "TCP Extensions for Long-Delay Paths"
- o [RFC1106] and [RFC1110] related to the "TCP Big Window and Nak Options"
- o [RFC1145] and [RFC1146] related to the "TCP Alternate Checksum Options"
- o [RFC1379] and [RFC1644] on "T/TCP -- Extensions for Transactions Functional Specification"
- o [RFC1693] on "An Extension to TCP : Partial Order Service"

## 3. IANA Considerations

IANA has marked the TCP options 6, 7, 9, 10, 11, 12, 13, 14, and 15 documented in [RFC1072], [RFC1146], [RFC1644], and [RFC1693] as "obsolete" in the "TCP Option Kind Numbers" registry [TCPOPTREG], with a reference to this RFC.

## 4. Security Considerations

As mentioned in [RFC4614], the TCP Extensions for Transactions (T/TCP) [RFC1379][RFC1644] are reported to have security issues [DEVIVO].

## 5. Acknowledgments

Lars Eggert is partly funded by [TRILOGY], a research project supported by the European Commission under its Seventh Framework Program.

## 6. References

### 6.1. Normative References

- [RFC1072] Jacobson, V. and R. Braden, "TCP extensions for long-delay paths", RFC 1072, October 1988.
- [RFC1106] Fox, R., "TCP big window and NAK options", RFC 1106, June 1989.
- [RFC1110] McKenzie, A., "Problem with the TCP big window option", RFC 1110, August 1989.
- [RFC1145] Zweig, J. and C. Partridge, "TCP alternate checksum options", RFC 1145, February 1990.
- [RFC1146] Zweig, J. and C. Partridge, "TCP alternate checksum options", RFC 1146, March 1990.
- [RFC1379] Braden, B., "Extending TCP for Transactions -- Concepts", RFC 1379, November 1992.
- [RFC1644] Braden, B., "T/TCP -- TCP Extensions for Transactions Functional Specification", RFC 1644, July 1994.
- [RFC1693] Connolly, T., Amer, P., and P. Conrad, "An Extension to TCP : Partial Order Service", RFC 1693, November 1994.
- [RFC4614] Duke, M., Braden, R., Eddy, W., and E. Blanton, "A Roadmap for Transmission Control Protocol (TCP) Specification Documents", RFC 4614, September 2006.

### 6.2. Informative References

- [DEVIVO] de Vivo, M., de Vivo, G., Koeneke, R., and G. Isern, "Internet Vulnerabilities Related to TCP/IP and T/TCP", ACM SIGCOMM Computer Communications Review (CCR), Vol. 29, No. 1, January 1999.
- [RFC2026] Bradner, S., "The Internet Standards Process -- Revision 3", BCP 9, RFC 2026, October 1996.

[TCPOPTREG] Internet Assigned Numbers Authority (IANA), "TCP Option Kind Numbers", <<http://www.iana.org>>.

[TRILOGY] "Trilogy Project", <<http://www.trilogy-project.org/>>.

Author's Address

Lars Eggert  
Nokia Research Center  
P.O. Box 407  
Nokia Group 00045  
Finland

Phone: +358 50 48 24461  
EMail: [lars.eggert@nokia.com](mailto:lars.eggert@nokia.com)  
URI: [http://research.nokia.com/people/lars\\_eggert](http://research.nokia.com/people/lars_eggert)

