TCP Maintenance and Minor Extensions (TCPM) WG
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1078 6013 (if approved)
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Moving Outdated TCP Extensions and TCP-related Documents to Historic and Informational Status
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Abstract

This document reclassifies several TCP extensions and TCP-related documents that have either been superseded, never seen widespread use, or are no longer recommended for use to Historic status. The affected RFCs are RFC 675, RFC 721, RFC 761, RFC 813, RFC 816, RFC 879, RFC 896, RFC 1078, and RFC 6013. Additionally, it reclassifies RFC 700, RFC 794, RFC 814, RFC 817, RFC 872, RFC 889, RFC 964, and RFC 1071 to Informational status.

Status of This Memo

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

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1. Introduction

TCP has a long history. Over time, many RFCs have accumulated that describe aspects of the TCP protocol, implementation, and extensions. Some of these have become superseded, are no longer recommended for use, or simply have never seen widespread use, respectively deployment.

Section 6 and 7.1 of the TCP Roadmap document [RFC7414] already classify a number of TCP extensions as "historic" and describes the reasons for doing so, but it does not instruct the RFC Editor to change the status of these RFCs in the RFC database.

The purpose of this document is to do just that. In addition, it moves all remaining TCP-related documents of the TCP Roadmap document with an "unknown" status either to Historic or Informational.

2. Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119]. These words only have such normative significance when in ALL CAPS, not when in lower case.

3. RFC Editor Considerations

The following two sections give a short justification, why a specific TCP extension or a TCP-related document should be moved to Historic or Informational. For the content itself, the reader is referred either to the corresponding RFC or, for a brief description, to the TCP Roadmap document [RFC7414].

3.1. Moving to Historic Status

The RFC Editor is requested to change the status of the following RFCs to Historic [RFC2026]:

- RFC 675 on "Specification of Internet Transmission Control Program" [RFC0675]: this document is replaced by final TCP specification [RFC0793].

- RFC 721 on "Out-of-Band Control Signals in a Host-to-Host Protocol" [RFC0721]: this proposal is not incorporated into the final TCP specification [RFC0793].

- RFC 761 on "DoD standard Transmission Control Protocol" [RFC0761]: this document is replaced by final TCP specification [RFC0793].

- RFC 813 on "Window and Acknowledgement Strategy in TCP" [RFC0813]: this document is incorporated into RFC 1122 [RFC1122].

- RFC 816 on "Fault Isolation and Recovery" [RFC0816]: this document is incorporated into RFC 1122 [RFC1122] and RFC 5461 [RFC5461].

- RFC 879 on "The TCP Maximum Segment Size and Related Topics" [RFC0879]: this document is incorporated into RFC 1122 [RFC1122] and RFC 6691 [RFC6691].

- RFC 896 on "Congestion Control in IP/TCP Internetworks" [RFC0896]: this document is incorporated into RFC 1122 [RFC1122] and RFC 6633 [RFC6633].

- RFC 1078 on "TCP Port Service Multiplexer (TCPMUX)" [RFC1078]: this proposal SHOULD not longer recommended for use for the following reason:

  * RFC 1078 destroys the semantics of TCP connection establishment.
  * RFC 1078 requires all new connections to be received on a single port, which limits the number of connections between two machines and raises security concerns.
  * There exist no known client side deployment of RFC 1078.

- RFC 6013 on "TCP Cookie Transactions (TCPCT)" [RFC6013]: although RFC 6013 was published in 2011, RFC 6013 SHOULD not longer recommended for use for the following reason:

  * There exist no known wide deployment and use of RFC 6013.
  * RFC 6013 uses experimental TCP option codepoints, which prohibits a large-scale deployment.
  * RFC 7413 [RFC7413] and [I-D.ietf-tcpm-tcp-edo] are alternatives to RFC 6013, which have relatively more "rough consensus and running code" behind them.

3.2. Moving to Informational Status

The RFC Editor is requested to change the status of the following RFCs to Informational [RFC2026]:

- RFC 700 on "A Protocol Experiment" [RFC0700]: this document presents a field report about the deployment of a very early version of TCP.

- RFC 794 on "PRE-EMPTION" [RFC0794]: this document clarifies that operating systems need to manage their limited resources, which may include TCP connection state.

- RFC 814 on "Name, Addresses, Ports, and Routes" [RFC0814]: this document gives suggestions and guidance for designing tables and algorithms to keep track of various identifiers within a TCP/IP implementation.

- RFC 817 on "Modularity and Efficiency in Protocol Implementation" [RFC0817]: this document contains general implementation suggestions.

- RFC 872 on "TCP-on-a-LAN" [RFC0872]: this document concludes that the sometimes expressed fear that using TCP on a local net is a bad idea is unfounded.

- RFC 889 in "Internet Delay Experiments" [RFC0889]: this document is a status report about experiments concerning the TCP retransmission timeout calculation.

- RFC 964 on "Some Problems with the Specification of the Military Standard Transmission Control Protocol" [RFC0964]: this document points out several specification bugs in the US Military's MIL-STD-1778 document, which was intended as a successor to RFC 793 [RFC0793].

- RFC 1071 on "Computing the Internet Checksum" [RFC1071]: this document lists a number of implementation techniques for efficiently computing the Internet checksum.

4. IANA Considerations

None of the documents moved to Historic or Informational status had TCP options numbers assigned. Therefore no IANA action is required for them.

5. Security Considerations

This document introduces no new security considerations. Each RFC listed in this document attempts to address the security considerations of the specification it contains.

6. Acknowledgments

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