

## A Short History of History of TCP-IP

<b>1973</b>	<p>"A Partial Specification of an International Transmission Protocol" is written by Vint Cerf. This paper first makes a reference to TCP. Fragmentation and reassembly of messages, formerly done by node computers on the network, become the responsibility of host computers.</p> <p>Vint Cerf and Bob Kahn write "A Protocol for Packet Network Interconnection", which is later published in 1974. This is the most detailed TCP outline to this point, and precursor to the first official specification.</p>
<b>1974</b>	<p><b>December:</b> A 3-way handshake is adopted for TCP. Cerf, Yogen Dalal, and Carl Sunshine write RFC 675, the first complete specification of TCP. The authors describe TCP in great depth, giving exact specifications for all elements of the Transmission Control Program.</p>
<b>1975</b>	<p><b>July:</b> V. Cerf, A. McKenzie, R. Scantlebury and H. Zimmerman write "Proposal For An Internetwork End to End Protocol". The authors propose for a host to host protocol for computer networks being developed all over the world.</p>
<b>1976</b>	<p><b>October:</b> Birchfiel, Plummer and Tomlinson write IEN 18, " Proposed Revisions to the TCP" which proposes changes to the TCP previously specified in RFC 675. Tomlinson discovered that the first design of TCP lacked and needed a three-way handshake in order to distinguish the start of a new TCP connection from old random duplicate packets that showed up too late from an earlier exchange.</p>
<b>1977</b>	<p><b>March:</b> Cerf writes IEN 5, " TCP Version 2 Specification" .</p> <p><b>July:</b> The triple network Internet is demonstrated for the first time. Cerf, Kahn and others link up 3 networks using TCP: packet radio, ARPANET and SATNET. Messages travel 94,000 miles from San Francisco to London to California "without dropping a single bit".</p> <p><b>August:</b> Jon Postel writes IEN 2, in which he disusses internet protocol as being formed by two components: a hop to hop oriented protocol, and an end to end oriented protocol.</p>
<b>1978</b>	<p><b>January:</b> Cerf and Postel write IEN 21, "TCP Version 3 Specification" which begins the splitting of TCP into TCP/IP. IP becomes in charge of routing the packets, while TCP takes care of packeting, error control, re-transmission and reassembly. TCP/IP enables fast and inexpensive gateways to be built. Jon Postel writes the fourth version specification for both TCP and IP. This is the first time IP has it's own formal specifcation. No less than five 2-day meetings are held this year to discuss TCP. Jon Postel writes the meeting notes, which are in IEN's 65-69.</p>
<b>1979</b>	<p>Postel writes new specifications for TCP and IP which show up in IEN's 123, 124, 127, 128.</p>
<b>1980</b>	<p><b>January:</b> RFC's 760 and 761 outline new specifications for the two protocols.</p> <p><b>Febuary:</b> TCP/IP becomes the preferred military protocol.</p>