Conceive of the Future Internet Based on the Research of TCP/IP Vulnerabilities

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Abstract

With the popularity of Internet, people are increasingly dependent on Internet. At the same time, however, some malicious persons conduct unscrupulous invasion on Internet by taking the vulnerabilities of TCP/IP protocols. TCP/IP protocols, which once acted as the cornerstone of Internet, have been unable to provide a secure platform for the communication taken place above it. Gradually, the security problems of TCP/IP protocols have begun to drawn people's attention. This paper explores and reveals that TCP/IP protocols have a large number of vulnerabilities that make Internet easily exposed to attacks by testing some different kinds of attacking labs, and then describes the most fundamental reason of the insecurity of TCP/IP protocols. Finally, this paper proposes an assumption to the future Internet based on the current research of TCP/IP protocols and Internet architecture.

Keywords: TCP/IP protocols, vulnerabilities, Internet Architecture