



RESEARCH ARTICLE

An Enhanced Security for TCP/IP Protocol Suite

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Abstract— *Network and internet applications are growing rapidly in the recent past. These applications are used by thousands of users and controlled by different administrative entities. It is mainly used as an efficient means for communication, entertainment and education. With the rapid growth of internet, there is a need for protecting confidential data. The Internet was however originally designed for research and educational purpose, not for commercial applications. So internet was not designed with security in mind. As the internet grows the existing security framework was not adequate for modern day applications. The main reason was due to the lack of security services in the TCP/IP Protocol Suite. The lack of authentication mechanism of TCP/IP Protocol Suite is mainly due to the poor protection mechanism of packets and broadcast nature of the lower layer protocols. Moreover there is no protection for the application layer of the network model. This paper presents the proposed security architecture for the TCP/IP Protocol Suite.*

Keywords— *Internet; Network security; ICMP; IP; Cryptography*

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