

AN INTEGRATED PROTOCOL FOR DETECTION AND AVOIDANCE OF DENIAL OF SERVICE ATTACKS ON MPLS

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ABSTRACT

In MPLS, unwanted traffic and malicious effect of different nodes leads the network to an erroneous network, resulting in lower efficiency. One of the main causes of erroneous network is Denial of Service (DoS) attacks. Generally the DoS attack harms the network system both in the domain of hardware and software. This paper presents an integrated protocol for detecting and avoiding the DoS attacks based on time, and bandwidth. In this protocol, the data is grouped and analyzed to detect the variety of attacks present in the network. For individual attack detection, an individual solution is presented. Finally, all the solutions are integrated and applied to the network so that every attack can be prevented. Both forward and backward checking is enabled to detect flood attack, SYN flood attack, ICMP flood attack, starvation attack.

KEYWORDS: Denail of Service, Detection, Integrated System, MPLS Networks