DDoS attacks in VoIP: a brief review of detection and mitigation techniques Abstract

Voice communication in recent trends has shown rapid growth in homes and businesses with the development of Voice over Internet Protocol (VoIP). The growth in VoIP subscribers was determined by the increase in VoIP flexibility, Quality of Service and monetary savings. The fall in public switched telephone network and raise in phone portability migrated PSTN to VoIP. The Session initiation protocol being an application layer protocol helps to create session between the caller and the called for bidirectional communication using SIP messages. The VoIP became targeted victim of different attacks as internet became the medium of transmission. The security vulnerabilities arise from new protocols and the existing infrastructure of traditional data network. Flood-based attacks are more threatening and annoying than other attacks. This brief review paper discusses on different types of VoIP attacks along with the existing VoIP detection and mitigation techniques based on Entropy, Wavelet, Sketch and Hellinger distance, Sunshine and RQA are presented.