

Abstract

IP Telephony, Internet Telephony, Digital Phone or usually called VoIP (*Voice Over Internet Protocol*) is a technology which allows voice conversation from long-distance with Internet media. VoIP users and IP-based multimedia streaming services raise problems in terms of security. Many users are most likely to lose their privacy in communication. To solve these security concerns should be implemented security systems.

Implementation of security systems will use VPN Gateway using SSL/TLS encryption in VoIP server. VPN Gateway method is used to develop private network, so that only certain users can use the private network. TLS method is used to secure user's signaling to the server. From the test results showed that VoIP server that used VPN Gateway and TLS can handle Eavesdropping Attacks, Attacking Authentication, Teardown Session, and Denial of Service.

Key Words : Security System, VoIP, VPN Gateway, TLS