ABSTRACT

To solve the security issues in data communication on public network (Internet) is born a *Virtual Private Network* (VPN). Inside there is a combination of technology VPN tunneling and encryption to create a VPN to be a reliable technology to solve network security problems. In addition to network security, also conducted testing of *Quality of Service* (QoS) as a measure of how well the network VPN.

Protocols of IPSec (*Internet Protocol Security*) is used as the implementation of protocols designed site-to-site VPN. While the SSL protocol (Secure *Socket Layer*) protocol is used as designed in the implementation of remote access VPN.

Based on the analysis of QoS, IPSec VPN is ideal for organizations that have a number of remote users that are relatively small and can control each user organization. To the opposite, then the SSL VPN to be a better solution. While the results of network security, both IPSec VPN and SSL VPN has a good level of network security for tunneling and encryption technology supported equally well.

Key Word: *virtual private network, network security, quality of service, internet protocol security, secure socket layer*