ABSTRACT

The use of the internet network now is a common thing for all people. Due to the openness characteristic, where user can access, share and added an information easily. But in hte other hand, user also need a network that has protection from other parties who hasn't concernment. Then come up Virtual Private Network (VPN) as one of the solutions that offered to securing data packets that transmitted on internet network.

One of the internet service which is currently widely used and discussed is Internet Protocol Television (IPTV), a digital television service that delivered through of high-speed internet network (broadband) via Internet Protocol (IP). Use of VPN technology in IPTV application expected to be able to securing data packets that transmitted from other parties who hasn't concerment. With also care about the quality of the IPTV service.

In the final project ***"Performance Analysis On The Use of IPsec and PPTP Protocol for Internet Protocol Television (IPTV) Application"*** conducted an analysis of the implementation of VPN using IPsec and PPTP protocol for IPTV applications on the IPv4 network and then compared between the two.. the parameters that tested include the influence of authentication, encryption and encapsulation that are different between these two protocols to the performance of IPTV, which includes the value of QoS ie; delta (interarrival delay), throughput, packet loss, and MOS values.

From the observation, QoS values that obtained were : delta (interarrival delay); PPTP 0,011000553ms–0,01913068ms; IPsec 0,01156776ms-0,02517933ms, throughput; PPTP 0,972-2,5016 Mbps; IPsec 0,9197-2,2714 Mbps, packet loss; PPTP 0,084%-1,48004%; IPsec 0,08951%-1,50113%. For the MOS subyektif PPTP 4,7-3,5 and IPsec 4,6-3,13 ; obyektif PPTP 4,25-4,07 and IPsec 4,25-4,06. It can be conclude that the use of PPTP is better in terms of performance, but that comparable to a lower security level for PPTP than IPsec.

Keywords : VPN,IPsec, PPTP, IPTV, QoS