ABSTRACT

Along with technological development with increased demand for multimedia communications, now so many methods developed to meet the needs of one service-based multimedia communications .. Video is example of multimedia application who requires sufficient bandwidth allocation to the requirements minimum delay and packet loss.

Current trends tendency towards IP-based applications (internet protocol) combined with high user mobility is encouraging the development of mobile IP. With mobile IP, each user can access the network while in motion. In user needs, the mobile IP is being developed again including handover Fast Mobile IPv6 (FMIPv6) which can overcome the problems faced by such MIP triangle routing problem causing large delays handover.

On this final thesis, i will implement a video conferencing application on the WLAN network (Wireless Local Area Network) in the case of mobile IPv6 with the scenario of a MN (mobile node) to access video conferencing applications from others MN through a server and perform a movement from home's network to foreign network with various kinds of background traffic. Video quality measurement of QoS include delay, jitter, packet loss, and throughput. By taking the observation points at the time of MN in the HN, MN during handover and at MN was in FN.

The results from this thesis are delay handover MIPv6 and FMIPv6 also QoS from Video conference will be know. Handover delay latency from MIPv6 is ranged between 2.1424782 and 2.6007336, eventhough handover delay latency from FMIPv6 ranged between 90,6 ms and 147,1 ms. From QoS result that been got, It can make a conclusion that FMIPv6 performance is better than regular Mobile IPv6.

Keyword: ***MIPv6, FMIPv6, handover, QoS.***