

ABSTRACT

The development of Mobile IP technology become popular because Mobile IP have many advantages on flexibility, affordability and scalability. With MIP technology, user can always connected to internet with the same IP address while moving into different places without internet disconnection. Beside that, MIP can be implemented and interconnected with other network such as: Local Area Network (LAN), Wireless Network and cellular network.

In this scripting, it will analyze handoff performance quality in three different scenarios. In the first scenario, it will use basic configuration of Mobile IP, where in scenario-2 it will use integration Mobile IP on Wireless Mesh Network, and for scenaro-3 it will use MIP on WMN configuration with an additional access point. Beside that this final project also analyze the mobile node velocity.

From the simulation result, packet loss scenario-1 is 4.48%, packet loss scenario-2 is 0,9% and packet loss scenario-3 is 5,33%. It indicates that mobile node velocity could affect the value of QoS.

The average delay on scenario-1 is 0,005119057 seconds, delay for scenario-2 is 0,001591967 seconds, and average delay on scenario-3 is 0,002445263 seconds. All of them are pass the minimum standard QoS based on ITU-T. It indicates that integration MIP on WMN with 7 mesh router and MN velocity 5 Km/hours can be implemented with good standard of QoS.

Keyword: *Mobile IP, Wireless Mesh Network*