

## **ABSTRACT**

In the growth and development of internet technology, the user is rising enormously. And with this, the user demands are also vary. These also cause the variety of the technology equipment. Start from laptop, smart phone, blueberry, digital cellular phone etc. Almost everyone tries to access the internet wherever and whenever they are in mobile. This is the reason which emerging the mobile IP technology to solve the internet user demanding problem in reliable mobility.

Besides offering several more addresses compare to IPv4 and simpler header format, IPv6 also allows Mobile Node to communicate directly with Correspondent Node which has the ability to change the route using IP address which is called the Route Optimization<sup>[11]</sup>. This optimization allows the packet transferring across a shorter route than through Home Agent.

This final task shows the Mobile IPv6 doesn't need Foreign Agent, but the Mobile IPv4 is using the tunneling process to transmit datagram from Correspondent Node to Mobile Node. This final task also shows that the Mobile IPv6 has better QOS than the Mobile IPv4, but both are still equally perform ITU-T G.1010<sup>[5]</sup> standardization when Mobile Node on Home Network and when on Foreign Network.