

ABSTRACT

Now a days currently the transition of addressing Internet protocol version 4 (IPv4) to the Internet addressing protocol version (IPv6). In addition due to the number of bits used in the IPv6 addressing more than IPv4, IPv6 also has a protocol which supports the handover protocol for mobile communications with the correspondent node node moving from a point of attachment to the point of attachment on the network by Wireless LAN (WLAN) .

At this final task, the authors implement a network that supports vertical and horizontal handover MIPv6. This type of handover is divided into two types of layers that are affected by the horizontal and vertical handover. Horizontal handover For Mobile IPv6 can be implemented and work with the optimal, research needs to be done by analyzing peformansi during horizontal and vertical handover.

With several scenarios such as speed of the Mobile Node movement and the access point analyzes the results obtain vertical and vorizontal Handover successfully performed on slices I, II, III, and IV, but it did not work on slices of IV. At the reception power level of less than -100 dBm .. Handover Latency, Packet Loss Percentage of, and the roundtrip time delay handover MIPv6 horizontal and vertical slices show optimal performance on the acceptance level III or Greater than -80 dBm.

Key Word : Mobile, IPv6, MIPv6, Handover, Peformansi, Packet Loss, Roundtrip Delay, Handover latency