ABSTRACT

Modern demand technology about wireless networking is user can be access everywhere and whenever by real time or continue. This experiment wants to build network model by mobile IPv6 using WLAN, so that got process handover with higher throughput and smaller delay. Supposed, when user move from one AP to the other, data communication will not be brokened off, user can be still open website, open email, even when user moving, they can continue to download or upload. It can be happen using mobile ip. For experiment, we chooses to use mobile ipv6 that has many surplus are compared with mobile ipv4, like route optimization process and auto address configuration. Experiment method that used to consist of analysis method and planning. Analysis method is done by analyze simulation result router advertisement, also analyze throughput, route optimization, active access point, and handover. Planning method is done with make network mobile IPv6 by using software opnet modeler. By using parameter from mobile ip we got result that simulation running appropriate planning before, user can handover from one AP to the other, user can also do route optimization, even with modify network modelling can got delay smaller. To get simulation result better, so we are should study opnet with interest detail related to parameters deeper.

Keyword: ipv6, mobile ipv6, wlan, 802.11, OPNET