SIMULATION STUDY ON WIRELESS LAN PERFORMANCE USING OPNET MODELER

This project thesis is presented in partial fulfillment for the award of the Bachelor of Electrical Engineering (Hons)

Of

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ABSTRACT

This paper presents the performance analysis of Wireless Local Area Network (WLAN). WLAN such as wireless Ethernet is an example of existing LANs communicating over wireless media. Replacing of cables in communication network using wireless medium, the flexibility in term of mobility for the end users has been improved. This project presents the simulation study on IEEE 802.11 WLAN protocol performance by varying the OPNET parameter settings for WLAN network. The simulation is conducted using OPNET Modeler. The study is focused on the effect of varying the Fragmentation threshold parameter and Request To Send or Clear To Send-(RTS/CTS) threshold parameter in ad hoc network and the functionality of access point nodes in switched network.

Keyword

Wireless Local Area Network, IEEE 802.11, OPNET Modeler

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