

ABSTRACT

IEEE 802.11g standard as an interface that has been implemented on universal device in this era. While the diverse type of traffic with difference characteristic require a guarantee of QoS for better use. Therefore the use of IEEE 802.11e standard is applied, because this standard is capable of providing QoS guarantees.

Simulation on this final project used NS2 by configuring ERP-OFDM and used patch of EDCA. Simulation performed with IBSS network structure with 1 access point and 3 nodes as server to generate traffics and 30 nodes as a client.

The simulation results show the delay and throughput as the main parameter for voice and video traffic can be guarantee by the EDCA, evidenced by the delay of voice that fluctuates in a range adjacent according to the scenario. While the file transfer traffic generate as a nuisance traffic to test the stability of the connection. Result obtained by that type of traffic gets a low priority in the transmission, evidenced by the large delay. In general, the network configuration with standards IEEE 802.11g and 802.11e can be provide better QoS.

Key words: IEEE 802.11e, 802 11g, ERP-OFDM