ABSTRACT

WLAN is a device that sending data on a computer network without using a media transmission cable (wireless) where mobility and flexibility of this tool is very good. WLAN have been standardized by IEEE 802.11 and already contained some changes. This experiment QoS of WLAN 802.11n with the parameter of *packet loss* using *Wireshark*.

This experiment prove the performance of the access point device Cisco WAP321 Wireless-N. Experiment will done on closed area (indoor). Methods undertaken in the form of the number of *user*s that are distributed with the distace between the access point to a different *user* as well as setup configuration in that device. Configured test parameter include transmit power, beacon interval, fragmentation *threshold*, RTS *threshold*, AIFS, *contention window*, and TXOP limit.

The results of this experiments show the best AP coverage is in 100% transmit power configuration. For *packet loss* values, 100 ms beacon interval configuration, fragmentation *threshold* 728 bytes, and RTS *threshold* 1024 bytes get better *packet loss* value. While the QoS effect on performances, AIFS3 schemes for AIFS, CW1 schemes for *contention window*s, and TL3 schemes for TXOP limit, provide the best average values for *packet loss*, *throughput*, and RTT delay.

Keywords : WLAN, IEEE 802.11n, QoS, *Packet loss*, Cisco WAP321 Wireless-N Access Point.