ABSTRACT

WLAN (Wireless Local Area Network) as one of the network access to users that operate using radio frequencies has some advantage over a LAN using using an ethernet cable. WLAN network, or known as Wi-Fi (Wireless Fidelity) is already implemented in many places such as home, school, Office, corporate and educational institutes. Although Wi-Fi provides convenience to users in accessing the internet but in using video streaming service still requires considerable bandwidth. In this thesis analysed the performance of streaming video service on 802.11n WLAN networks with parameters to be tested include delay and jitter, throughput. Testing is done using the software simulator NS-3 operating system Ubuntu, which is simulated in some scenarios. Each scenario is differentiated based on number of users and the packet size which is simulated within 5 minutes. The value of the highest throughput amounted to 536.48 kbps, the lowest delay 16.82 ms, jitter lowest 0 ms. number of users very influential towards the value of QoS can be seen from the decline in the value of the original 536.48 kbps throughput be 117.22 kbps, delay the ride originally 16,82 ms became 100,27 ms and jitter values that originally 0,034 ms. 0,071 ms with the initial 10 user raised to 50.

Keywords: WLAN, 802.11n, Video Steaming, QoS, NS-