

ABSTRACT

This research discusses the performance of the lumintu network by looking for the highest traffic based on peak hour calculations using the ADPH, TCBH and FDMH methods which are associated with the results of the Quality of Service (QoS) parameters, namely throughput, delay, jitter, and packet loss. The purpose of this research is to determine the quality of the network that has been provided, given the increasing number of customers. The results of this research are the highest traffic using the FDMH upload method of 96.35 Mbps, download of 1774 Mbps on Wednesdays at 10.00–11.00, ADPH upload method of 123.36 Mbps on Mondays at 14.00–15.00, download of 1920.32 Mbps. on Wednesdays at 13.45–14.45 while the TCBH method uploads 86.56 Mbps on Wednesdays at 11.30–12.30, downloads at 1797.2 Mbps on Wednesdays at 12.45–13.45 and for the QoS results in a very good category, the throughput parameter is found in the method ADPH download is 260.92 kbps (standard >100bps), very good category delay is found in the TCBH upload method of 67.56 ms (standard <150ms), the jitter parameter is good category in the TCBH upload method of 67.58 ms (standard <75ms), packet loss in the good category on the TCBH upload method is 3.03% (standard <15%). So it can be concluded that the quality of the Lumntu network based on the highest traffic is still in good condition.

Keywords: Internet service provider (ISP), Traffic, Quality Of Service (QoS), Busy Hours, Internet.