ABSTRACT

This final project is an analysis of bandwidth management simulation using the HTB method to improve QoS using the adoption of Telkom University's CeLOE topology model on GNS3. This final project aims to determine QoS using the adoption of the CeLOE Telkom University topology model using the HTB method. Bandwidth management is done by creating an HTB queue and will be given Max-Limit and Limit-at which aims to limit the bandwidth that can be received by each user. The method used to analyze the data that has been used with the HTB queue is a quantitative descriptive analysis technique which is calculated with the results of the QoS parameters. The results of the QoS parameters are: (1) Throughput has an average value of 307.4Kbps from several trials. (2) Packet Loss has an average value below 3% from several trials that have very good scores. (3) Delay has an average value below 150ms from several trials that have very good scores. (4) Jitter has an average value of 0ms to 75ms from several trials that have very good values. Based on the results of the analysis in the simulation, the HTB queue method is very good for use in improving QoS.

Keywords: HTB, QoS, Topology, Bandwidth, Queue