

## ABSTRACT

*Telkom University has a TULT Building which is a lecture building. The TULT Building has internet services that can be accessed by all internet users in the TULT Building, but internet services in the TULT Building are not maximized because there are some users who experience network problems but there are some users who do not experience network problems when using internet services in the TULT Building. This can create a sense of injustice between fellow users. Therefore, it is necessary to have bandwidth management to improve the quality of the network in the TULT Building. In this research, the author uses the FIFO and SFQ methods. FIFO is a bandwidth management method where the first packet to enter the queue will leave according to the queue order. SFQ is a bandwidth management method that focuses on equally distributing bandwidth to prevent dominating traffic flows. The results of this study by referring to the standardization of ITU-T, that the delay and jitter of the two methods get the same category, namely delay with the category "Very Good" below 150ms and jitter with the category "Good" with a range of 0-75ms. However, the packet loss value in the FIFO method is superior to the SFQ method. Because FIFO gets the "Very Good" category with a packet loss range of 0-1%. So it is concluded that the FIFO method is more appropriate to use on the TULT Building network.*

**Keyword- *Bandwidth Management, First In First Out, Stochastic Fair Queueing, Quality of Service***