

ABSTRACT

In today's digital era, network connectivity has become very important in everyday life. Two technologies commonly used to access the internet are Wireless Local Area Network (WLAN) and 4G networks. The use of reliable and efficient wireless networks is key in supporting communication and data exchange activities. In a campus environment such as Telkom University Landmark Tower, the need for a stable and fast internet network is very important to support the academic, administrative, and personal activities of users. In this context, it is important to examine the QoS aspects of both technologies, including speed, availability, latency, and reliability of services. To support various activities carried out on TULT, of course, it requires good network performance in accordance with existing standards and because of this, TULT network performance needs to be measured looking at the quality of network performance. This study used statistical analysis methods. Statistical analysis is used to analyze data that has been processed. Based on the analysis that has been done, the average value for each QoS parameter that has been carried out for 3 days, the average throughput value for Wi-Fi TULT is 2.39 Mb / s with the Very Good category and 4G Telkomsel 0.83 Mb / s with the Sufficient category. The delay time for both networks is categorized as Very Good with an average value of 4.02 ms for TULT wi-fi and 4.41 ms for Telkomsel 4G. For the packet loss parameter, the average packet loss value for Wi-Fi TULT is 9.5% and 4G Telkomsel is 11,05%, where both networks are categorized as Good.

Keywords: *Quality of Services, TULT, WLAN, Telkomsel's 4G, TIPHON*