

ABSTRACT

The infrastructure and management of a computer network are crucial elements in ensuring user satisfaction and comfort when accessing internet services. The role of the internet is particularly significant for SMAN 20, yet in practice, users frequently encounter several issues, such as slow internet speeds, difficulties in connecting to the network, and inefficient bandwidth allocation. To address these issues, it is necessary to conduct an analysis of the network quality at SMAN 20 Bandung, utilizing the Quality of Service (QoS) testing method.

The framework employed in this study is PPDIIOO, which is limited to the design phase. The testing was conducted by capturing network log data using Wireshark during both off-peak and peak school hours, with students, management staff, and administrative staff acting as the test subjects.

From the analysis carried out, the public network traffic quality parameters are better during free hours, because the user character is more intense. Meanwhile, the quality of network traffic management and admin got a perfect score in both free and peak hours. This is because the connection type is wired, and the bandwidth is bypassed.

Kata Kunci – QOS, Wireshark, *Throughput*, *Packet Loss*, *Delay*, *Jitter*