ABSTRACT

ANALYSIS OF NETWORK PERFORMANCE OF THE WIRELESS LOCAL AREA NETWORK (WLAN) AT THE BADAN KEPEGAWAIAN DAERAH PROVINCIAL OF SOUTH SUMATERA

Quality of Service (QoS) is a mechanism on the network that determines that applications or services can operate in accordance with predefined service quality standards. Referring to the importance of the quality of network services and QoS measurements that have not been made that can be used to measure how big the quality of service should be filled, so Writer wrote the title in this study is "Analysis of Network Performance of the of Wireless Local Area Network (WLAN) at the Badan Kepegawaian Daerah Provincial of South Sumatera". The tool used in this research is Biznet Network Speedtest, to measure actual bandwidth and Axence Nettools to measure throughput, delay, and packet loss. While the method of writing using action research and analysis metode that using is OoS with parameters bandwidth, throughput, delay, and packet loss and compares its value with the Telecommunication and Internet Protocol harmonization over network (TIPHON) network standardization from the measurement of QoS parameters that obtained throughput percentages above 76% of received data packets (Received), the average value of delay below 150 ms and packet loss below 3% ranges on the average index 4 which includes a very good category. Factors that may affect network QoS are attenuation, distortion, noise and bandwidth capacity.

Keywords: WLAN, QoS, TIPHON, Biznet speedtest, Axence Nettools