

ABSTRACT

Comparison Analysis Of *Quality of service (QoS) Wireless LAN 802.11N With Wireless LAN 802.11AC On YouTube Streaming Services*

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Quality of service (QoS) is the collective result of various performance criteria that determine the satisfaction level of a service. The problems that often occur in the WLAN 802.11N field are prone to overlapping because this standard only supports 13 channels consisting of 3 non-overlapping channels (Channel 1, 6, and 11). Therefore, WLAN 802.11AC is here to answer WLAN problem solutions 802.11N at this point. From the existing problems, it is necessary to analyze QoS parameters such as *delay*, *packet loss*, and *throughput* which aims to determine the performance of a *wireless* standard. To analyze the QoS parameters in this study, the TIPHON (Telecommunications and Internet Protocol Harmonization Over Network) standard method issued by the European Telecommunications Standards Institute (ETSI) was used. The test scenario in this study is to compare the *channel widths* of each *wireless* standard. The *routers* used in this study are Tenda F9 for the *wireless* N standard and Tenda AC23 for the *wireless* AC standard. The results obtained in this study on the *throughput* and *delay* parameters were surpassed by Tenda AC23 on the 5Ghz frequency band on the 80 Mhz *channel width* of 9432.2 Kb/s in *throughput* results and 0.97ms in *delay* results. While on the *packet loss* parameter, each *wireless* gets an average result of less than 0.1%. This relates to the YouTube *streaming* service by adopting the QUIC protocol which can significantly reduce *packet loss* and *delay*.

Keywords: QoS, WLAN N, WLAN AC.