

ABSTRACT

The demand for mobile services quickly and reliably has become the basis of current Internet multimedia service. Progress in the field of IT and research by producing a variety of multimedia content online that can be enjoyed anywhere and anytime. IPTV as one of the content is quite interesting in providing information and entertainment for its users, especially with features that are more interactive. IPTV enthusiasts can record, select and even schedule the event that you want to enjoy a cost that is already in the set. The reliability of this IPTV service will determine the satisfaction and convenience for consumers who pay for these services.

IPTV QoS in particular on mobile WiMAX network is influenced by the speed of user movement. In this study conducted simulations on OPNET software where the variation movement of the user is constantly monitored to see the QoS parameters are obtained and compared kualits jarinagn of each of which has been designed for speed. QoS parameters are analyzed in the form of delay, jitter, throughput, packet loss, and application delay.

From all the simulation results can be seen that the maximum value achieved at a speed of 20 km/h where the packet loss generated only 5.6% for traffic with no background and 8.6% for traffic with the background, delay value 0.022332s without background and 0.062524s with background, amounting throughput 602095.472bps without background and 582931.947bps with the background. Overall user speed is still possible to enjoy IPTV is 20Km/h-100Km/h to traffic with no background and hose 20Km/h-80Km/h to traffic with the background, because the hose speed packet loss experienced is still below 20% according to standard. 140Km/h speed as standard and experiment is not recommended to enjoy IPTV services on mobile WiMAX networks because users can not enjoy the full IPTV broadcasts due to missing data is large enough.

Key Word : Handover, IPTV, Mobile WiMax