ABSTRACT

High-speed wireless communication is a necessity that can not be negotiable. Today more users need high-speed wireless connections. Wimax standard provides high-speed wireless service for long distances.

WiMAX is a wireless network that designed to serve various type of traffic. Therefore, it is required to fulfill the needs of WiMAX QoS (Quality of Service) from multiple applications and information through the network. Proper implementation for packet scheduling that brough on the WiMAX network can improve QoS.

In this final task will discuss about the comparative performance of the scheduling algorithm associated with the performance of WiMAX networks, the Weighted Round Robin (WRR) and Fairness Queueing (FQ). The parameters will be used, throughput, delay queue, and packet loss. From the experimental results of adding the number of users, the best performance of 10th on the number of users, with a delay of WRR, FQ, and SFQ is 9.804 ms, 9.887 ms, 9.4695 ms. And WRR scheduling algorithms for throughput, FQ, and SFQ is 471.2 Kbps, 471.2 Kbps, 471.2 Kbps. Meanwhile, when the network traffic is charged background, delay WRR scheduling algorithm, FQ, and SFQ 9.4695ms, 9.887ms, 9.4695ms. And the lowest throughput WRR scheduling algorithm, FQ, and SFQ is 149.318 Kbps 149.15 Kbps, 150.705 Kbps. With the highest packet loss is 44.53%, 46.6%, 44.02%.

Keywords : scheduling, Weighted Round Robin, Fairness Queueing, NS2