Abstract

LTE is introduced to improve the capacity and speed of wireless data network. LTE uses data network in basis of *internet protocol* (IP) in which it is used to all services (Voip, Video, and streaming). Generation of 4G as wireless service is set aside to users in fulfilling broadband mobile application with high mobility. The LTE speed on download can achieve 100 mbps. Then, one of the purposes of LTE network is to improve data rate in fulfilling services such a(Voip, Video, and streaming). Therefore, it needs a scheduling pack to fulfill the nescessity of multimedia services with a good real time.

This research tried to compare several scheduling algorithm namely *exponential proportional fairness* (EXP/PF), *proportional fairness* (PF), *exponential rule*. It was conducted by analyzing the scheduling algorithm to recognize which the better performance that was applied in LTE network by testing parameters.

The result showed that the *exponential rule* algorithm provided the better work than the exponential proportional fairness and the proportional fairness algorithm which is seen from tested parameters namely delay, throughput, packet loss, and fairness with trafik Video, Voip, and data.

Keywords : LTE, Algorithm (EXP / PF), proportional fairness (PF), Exponential rule