

## ABSTRACT

In the beginning, internet network is used to transfer simple data from one network to the others, with the development of computer and internet that more and more rapid, and also appearances more complex application, so internet not only through or transmit text data, but also information like voice, video, speech and others. Beside that multimedia application that have streaming characteristic on the internet network and need good Quality of Service (QoS) must be noticed, because it will be has influence to the quality from that application.

One way to improve the quality from the system is scheduling system or queue system. Queue system that used have several method, like First In First Out (FIFO), Priority Queue (PQ), and Priority Aged Queue (PAQ). On this queue method will be simulated packet that through over server or router on the internet networks. To measure the performancem, then in the queue system will be seen about several parameters, as throughput, loss, and delay. The expectation result from simulation is comparison about performance from FIFO, PQ, and PAQ algoritms; so we can improve the quality (QoS) on the internet network.

The simulation result show that FIFO algorithm have the biggest loss for UDP packet, while for PQ and PAQ algorithm, UDP packet has a small loss. PAQ algorithm decrease amount of loss thath happen on TCP packet, this can cause time delay on UDP packet more longer than PQ algorithm. The time delay that occur on PAQ algorithm can be toleranced for the application thath using UDP protocol. On the system, UDP packet will be toleranced time delay about 300 ms, for serve TCP packet that still waiting on the buffer.