## Abstract

The development of wireless technology had brings many changes in trend to communicate. One of the wireless technology that grow right now is called Mobile Ad-hoc Network.MANET have a characteristic that support mobility of end device and did not need infrastructure to built a network.

Seeing that character that MANET has, of course the performanse is less than an infrastucture network. For that reason, a new techinque is needed to increase the performance of MANET. Tha technique is called Quality of Service (QoS). With QoS, data packet will be serviced according to its privilage.

There is a several technique that can be used in QoS implementation. One that will use in this topic called Differetiated Service. This technique will mark the packet that will transmited in the network with a priority so every packet will served accordingly to its priority. The higher the priority, the higher its served.

This task is to measure the performance of MANET with QoS implementation to serve data packet of multimedia application in UDP transport. And the result is MANET with QoS serve better.

**Keywords**: MANET, QoS, Differentiated Service.