

## **ABSTRACT**

In the era of developing communication through IP, human interactions are much easier compared to decades before. Data transmits are becoming easier, faster, more efficient, and more interesting. Decades ago, internet is not much more than text. Multimedia becomes important as internet communication develops, integrating text, audio, video, animation, graphic, and other media.

This final project consist of analysis of multimedia transmitting process in wireless ad hoc network. The network plan will be simulated with Network Simulator 2.28 software. The network plan will analyze the performance of MPEG-4 video format in mobile wireless ad hoc network with AODV Protocol. The useful patch to process the video trace in Network Simulator is myevalvid2

The result analyze several parameter: PSNR, average delay, rate, and frame loss. In a variant frame quality, qscale 7 has the best MOS and qscale 1 has the worst MOS. In a variant frame rate, 26 frame per second is has the best MOS and 10 frame per second has the worst MOS. Variant combination of frame quality and frame rate has the best MOS in qscale 5 with frame rate 26 fps and the worst MOS in qscale 2 with frame rate 30 fps.

**Keyword** : MPEG-4, Network Simulator 2, Myevalvid, Wireless ad hoc.