ABSTRACT

Wireless network technology has been implemented in many mobile device such as notebook, PDA, and smartphone. Wireless network can be build among them in limited area without fixed infrastucture (router and gateway), this type of netwrok is called *Mobile Ad hoc Network (MANET).*

Some network aplication like *video streamming*, node source must send the same packet to all reciever in this case multicast technic is use. Important issue in MANET for multicast is routing (how route is build between multicast group) at least there are two method used by multicast protocol : tree based and mesh based.

In this final project we will analys and compare the performance of MAODV protocol *(Multicast Ad Hoc on Demand Distance Vector)* which is *tree based* and ODMRP *(On Demand Multicast Routing Protocol)* which is *mesh based* in simulations. Metric for evaluated both protocol are Packet Delivery Ratio and Control Packet transmitted/Data Packet Delivered. Network parameter that use for measured both protocol are mobility speed, number of source and number of reciever.

Based on simulation result the performance of ODMRP is better then MAODV. In mobility speed simulation, ODMRP Packet Delivery Ratio remaind constant but in MAODV the value of PDR dicreased signinificantly. In MANET consist of node that have high speed mobility, ODMRP protocol is better to use.

Keyword : *Protokol Routing,Wirelles, Ad-Hoc Network, Multicas.*