

Abstract

Mobile ad-hoc network (MANET) is a collection point wireless devices (nodes) that has the ability to dynamically manage and organize independently, even without the presence of a network infrastructure. Within this network, each point is not only as hosts, but also as a router that forwards data packets to other devices. The function of the ad hoc network is highly dependent on the routing protocol that determines the path or route between the nodes. This final project is run on the network simulator 2.

In this final project will be analysed the performance between the two protocols represent the two types of protocols that exist in the MANET network, which is a hybrid protocol that is represented by MP-OLSR and the reactive protocols are represented by AOMDV. Performance of both protocols will be based on three metrics, namely delay, throughput and packet delivery fraction.

Based on the analysis of this study, MP-OLSR protocol has better performance than protocols AOMDV due to using an algorithm Transformation Mojette to secure the data which increase the packet delivery fraction.

Keywords : Mobile ad-hoc networks, hybrid, reactive, MP-OLSR, AOMDV, network simulator