## Abstract

Mobile Ad Hoc Network (MANET) is a collection of mobile nodes which decentralized where the information exchange is processed via wireless transmission media / wireless. In Mobile Ad hoc Network (MANET), the nodes are equipped with wireless devices have the ability to manage and organize independently, even without the presence of a network infrastructure, or in other words that a node in MANET can act as a source as well as destination

In Mobile Ad Hoc Network (MANET) routing protocol is needed so that each node can communicate with another node that is out of reach, at the moment a lot of research done on several existing protocols in wireless ad-hoc network to determine the performance of each protocol.

In this final project, an analysis of the performance of the routing protocols temporally Ordered Routing Algorithm (TORA) that are reactive with the routing protocol Ad - hoc Ondemand Multipath Distance Vector Routing (AOMDV). From the simulation results obtained in the Network Simulator, in the scenario of speed changes and increase in the number of nodes, the value of AOMDV performance is better when viewed from the parameters of throughput, delay, routing overhead, and the NRL than TORA. Whereas the value of PDR, TORA slightly is better when compared to AOMDV . While in the presence or absence of background traffic scenarios for fellow AOMDV routing protocol , performance in the presence of background traffic AOMDV is better when viewed from the parameters throughput , routing overhead and NRL, but from the resulting delay value AOMDV is better without background traffic . In the PDR value , while the speed of 0 m / s and 1 m / s AOMDV without background traffic slightly is better when compared with background traffic , while at the speed of 5 m / s , 10 m / s , 15 m / s , and 20 m / s just the opposite .

Keyword : MANET, Node, Protokol Routing, TORA, AOMDV dan Network Simulator