

ABSTRACTION

An adhoc mobile network is some wireless nodes that gathering together, which is formed without structural formation. Adhoc appears as a peer to peer network without centralized server. One of the famous routing methods in adhoc network is AODV.

An adhoc network can also be formed into several topologies and it regards from the coverage area of each node. So that, it becomes similar with the ones in wired LAN such as star topology, ring topology, and peer to peer topology.

In this final task, simulation will be done by paying attention to the point of ad hoc network's shape of topology. Those shapes are ring topology, star topology, and peer to peer topology. AODV is the routing protocol for this simulation, where it is one of the routing mechanisms that based on reactive (on demand routing). Analysis is focused on the performances of ad hoc network using AODV routing protocol.

From the analysis's result, it will be noticed that ad hoc network's peer to peer topology performance is better than ring and star topology performance. This is because of the source node and the destination node in peer to peer topology is still in the same coverage area. In the other hand, ring topology performance is better than star topology performance. This is because of the coverage area factor and the alternative path for reaching the destination node and also based on some QoS parameters that influenced by packet size and the interval time of sending packets. For throughput, wired LAN network's performance is better than ad hoc network's performance.