ABSTRACT

Vehicular Ad-hoc Network (VANET) is a subset concept from Mobile Ad-hoc Network (MANET). Vanet's nodes in the network assumption as vehicle in a real life. VANET has charactheristics movement very fast and VANET's topology always change. Defend the route is very important in VANET, so it can be increase Energy Consumption. This final test research analyze the efficient Energy Consumption in DTN based routing algorithm called Spray and Wait routing algorithm. We also attempt to modificate it in order to increase it's efficiency.

Spray and Wait is the chance-based routing protocol and the improvement from Epidemic Routing. This protocol has two phases; Spray phase and Wait phase, At the Spray phase, the code from the source nodes is passed though different relay in the network (a copy of message that spreaded through the source nodes's network). Meanwhile at the Wait phase, if the destination is not found at the Spray phase, each nodes has a consecutive copy of message that transmitted directly to it's destination.

Based on observation, the resulting modification of Spray and Wait routing algorithm improve performance average delay, packet delivery ratio (PDR), and energy consumption than Epidemic and Spray and Wait routing algorithm.

Keywords : One Simulator, Spray and Wait, Packet Delivery Ratio, Average delay.