

Abstract

Vehicular Ad hoc Network (VANET) is a subset concept of Mobile Ad-Hoc Networks (MANET) that created to Intelligent Transport System (ITS) to improve driving safety , comfort in driving and traffic management .In VANET concept a vehicle act as a node in network can communicate with each other,without fixed network infrastructure. In VANET, the network topology change frequently due to the mobility of vehichle are very high. Therefore, proper routing protocol are needed to improve VANET performance, One of routing protocol that has been tested in MANET is DYMO and AOMDV . But the two routing protocols has not been tested and simultaneously compare the VANET network . Simulations will be performed using NS2.34 and SUMO 0.12.3 with two main scenario environment that is urban and highway scenario environment. In each scenario also tested the influence of the number and speed of the node. Each scenario was tested for 180 seconds. From the simulation result obtained that AOMDV decreased performance when applied in VANET scenarios while DYMO has a better performance based on the value of the parameter average end-to-end delay, throughput, routing overhead and packet delivery ratio for all simulated scenarios.

Keywords : AOMDV , DYMO , highway , NS - 2 , urban , VANET , SUMO 0.12.3