

Abstract

Vehicle Ad Hoc Network (VANET) is part of the development of Mobile Ad Hoc Network (MANET). In the concept of VANET, a vehicle acts as a node in the network can communicate with each other without the need for fixed network infrastructure. Communication between vehicles is used to improve driving safety, comfort, and also entertainment. In VANET, the network topology change frequently due to the mobility of vehicles (nodes) are very high. Selection of the appropriate routing protocol to improve communication performance is a major problem in VANET. Routing protocol used is DSDV and DYMO. Both routing protocols will be tested its performance based on test parameters throughput, packet delivery ratio, average end-to-end delay, and routing overhead in urban and highway environments. After the simulation result is obtained, on the highway scenario, DYMO routing protocols produce better performance than DSDV. DSDV is not suitable to be applied in the highway environment. While the urban environment, DSDV produce performance equally good with DYMO. However DSDV slightly superior in throughput and packet delivery ratio, while DYMO better on average end-to-end delay and routing overhead.

Keywords: *vanet, dymo, dsdv, routing protocol*