A study on vehicular ad hoc networks

ABSTRACT

Vehicular Ad Hoc Networks (VANETs) are special class of Mobile Ad Hoc Networks (MANETs) formed by vehicles equipped with wireless gadgets. The communication in VANET occurs between Vehicle 2 Vehicle mode and Vehicle to road side unit forming an intelligent transport system. Routing plays an important role in forwarding the required data to the nodes or vehicles. In this paper we investigate the performance evaluation of reactive routing protocols such as AODV and DSR and proactive routing protocols such as OLSR in urban city traffic scenario using SUMO and network performance using NS3 to find an appropriate protocol by using network parameters such as packet delivery ratio, throughput and delay. From the simulations we observed that AODV fared well over other routing protocols in VANET scenarios.