Performance Evaluation of Proposed Secured Minimum Delay Routing Protocol (SMDRP) in Vehicular Adhoc Network

ABSTRACT

In the present day research of vehicular Adhoc networks, the design of an efficient routing protocol providing high speed communications is a technical challenge for researchers in this area of study. A protocol that is secured, stable and reliable is an important aspect for the vehicular as hoc networks. The present day existing routing protocols designed for vehicular communications are not providing the required quality of service in VANETS and still research is going on for providing the full-fledged support for intra and inter vehicular communications. In our research we proposed a protocol called as Secured Minimum Delay Routing Protocol (SMDRP) by utilizing the clustering technique and location information using GPS. For the network performance we evaluated the different network parameters with protocols such as GPSR, CAGFP and GRUV using NS3 a network analyzing simulator. The simulation results show that SMDRP showed cost effective in terms of packet delivery ratio, throughput and end to end delay.