Abstract

Vehicular Ad-hoc network (VANET) is a collection of vehicular nodes forming a temporary network without the aid of any centralized administration or infrastructure. VANETs have no stable topology due to its dynamic nature of nodes. So, reliable and efficient routing is one of the main challenges in VANETs. Therefore, so many routing algorithms and protocols have been enhanced and developed for accomplishing this task. Therefore, it's very tough to determine which protocol performs best in different network scenarios. This paper present Improved Multicast AODV (IMAODV) routing protocol with limited source routing that ensures giving on-time, reliable and accurate data in V2V communication as compare to Improved AODV (IAODV). In result analysis, performance of the proposed IMAODV protocol is compared with AODV, IAODV and MAODV protocol in terms of Average. End-to-End Delay (Avg. E-to-E Delay), Packet Loss Ratio (PLR), Packet Delivery Ratio (PDR) and Normalized Routing Load (NRL). Simulation analysis results show that IMAODV protocol performs better than IAODV protocol in VANETs.
An Improved Multicast AODV Routing Protocol for VANETs

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Index Terms

Computer Science

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Keywords

VANET  AODV  IMAODV  MATLAB