Abstract

VANET is a highly movable wireless ad hoc network that is meant to support road safety, monitoring the traffic etc. In VANET environment, each vehicle can go for access to data from RSU or can communicate to any other vehicle. In this scenario, service scheduling becomes an important challenge to provide equal distribution of data access. “Data Scheduling” measured a very important issue in VANET to successful delivery of data item to the vehicle in proper and accurate way. Communication among vehicles are becoming a promising technology for security, management of traffic, monitoring and controlling of pollution, and numerous other road safety and traffic applications. Due to this a lot of data is generated that must be shared between communication parties efficiently. A major load is caused on the network infrastructure because of all this generated data, and the main aim of the network infrastructure is to provide constant services to the users. Thus, in order to manage the load on the network in such situations, a new scheme is proposed which suggests to cache frequently accessed contents at particular locations such as vehicles and RSUs so that data can be accessed from either local cache or RSU cache without the need to flood requests for the required data in the whole
network thus reducing the delay and ultimately increasing the throughput.

References


7. Neeraj Kumar and Jong-Hyouk Lee, Senior Member, IEEE, “Peer-to-Peer Cooperative Caching for Data Dissemination in Urban Vehicular Communications”.


11. Xia Shen, Student Member, IEEE, Xiang Cheng, Senior Member, IEEE, Liuqing Yang, Senior Member, IEEE, Rongqing Zhang, Student Member, IEEE, and Bingli Jiao, Member, IEEE “Data Dissemination in VANETs: A Scheduling Approach” IEEE Transactions on Intelligent Transportation Systems, Vol. 15, NO. 5, October 2014, pp.2213-2215.


Index Terms

Computer Science Wireless

Keywords

Vehicular Ad Hoc Network (VANET), Peer to peer (P2P), Vehicle to Infrastructure (V2I), Vehicle to Vehicle (V2V) Fast Interacting Ad Hoc on Demand Distance Vector (FIAODV).