

IMPROVED EFFICIENCY OF WORKLOAD ASSIGNMENT IN VANET USING DOVE

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Article Received: 13 March 2017

Article Accepted: 23 March 2017

Article Published: 26 March 2017

ABSTRACT

To create a data dissemination protocol has been an immense challenge, outstanding to the highly dynamic and unreliable wireless channel in Vehicular Ad hoc Networks (VANET). In novel, a number of motivating solutions are planned to perform data dissemination for this environment. To progress the effectiveness of data dissemination, the number of message copies that can be increase controlled and a distributed DOVE is proposed in VANET. In this paper, we propose a decentralized method that overcomes above requirements and provides consistent and scalable communication in both intense and auxiliary traffic for VANET.

Keywords: VANET, MANET, Data Dissemination, scalable communication, DOVE.

1. INTRODUCTION

Vehicular ad hoc networks (VANETs) is an promising technology which has arriving group of awareness outstanding technology, to its possible to recover vehicle and road protection, traffic control, effectiveness as well as convenient for users. VANET belong to a sub category of Mobile Ad hoc Network (MANETs). A lot of investigate in VANET is done on routing, broadcasting, Quality of Service (QoS) and security [2]. The main feature of VANETs is that mobile nodes are vehicles endowed with sophisticated “on-board” equipments, traveling on constrained paths (i.e., roads and lanes), and communicating each other for message exchange via Vehicle-to-Vehicle (V2V) communication protocols, as well as between vehicles and fixed road-side Access Points (i.e., wireless and cellular network infrastructure), in case of Vehicle-to-Infrastructure (V2I) communications[3]. V2V communications and exchanging of security data can be consistently approved by using IEEE 802.11p VANET.

2. LITERATURE SURVEY

Vehicular wireless broadband can be accessed over IEEE 802.16 metropolitan networks. Usually, Vehicular communication in VANET can be categorized two types. First one is Inter-vehicle communication [V2V] and second one is Intra-vehicle communication [V2I]. In this research we review routing method [4],[5] to achieve an reliable and secure routing in vehicular ad hoc networks. DOVE: Data Dissemination to A Fixed Number of Receivers in VANET. Many applications of VANET require disseminating data to a fixed number of recipients. This means that the message is to be sent to a particular fixed number of vehicles. This is achieved by implementing the technique of this paper with a small overhead and little inaccuracy [6]. We considered to a required quantity of receivers in VANET (DOVE) system. DOVE [7] is stimulated by processor development take care of roads as processors to optimize the workload assignment and progress the effectiveness of on-road dissemination. DOVE reaches the desired number of receivers with little imprecision and minimizes the dissemination delay with low

communication overhead. In [8][9] these papers, author proposes a new mechanism to maintain QoS for data dissemination among the different vehicles in VANETs. An intelligent forwarding mechanism is used by newly defined metric which assigns weights to the different routing paths from source to destination. Separate algorithms are designed for route construction, and maintenance in the proposed scheme.

3. IMPROVED EFFICIENCY OF WORKLOAD ASSIGNMENT IN VANET USING DOVE

To decrease communication transparency in workload assignment, we let the disseminator group the allocation messages according to the assignment tree. Prior to sending an assignment messages, we first categorize intersection according to their directions. Then, the allocation messages are routed to the intersections of the same directions together to avoid redundant forwarding.

Broadcast Message = Total number of sender messages / Total number of Received Messages

In a usual traffic situation, total number of broadcast messages sends to communication network, which contains messages of communications data, receiver acknowledgment, and workload allocation, under different dissemination intervals.

4. CONCLUSIONS

This research proposed the DOVE in VANET. To decrease communication transparency in VANET we have implemented in improved workload assignment model. This paper proposed the workload assignment. This improved workload assignment is used to recover effectiveness of road dissemination.

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