GREEDY INTERSECTION-MODE ROUTING STRATEGY PROTOCOL FOR VEHICULAR NETWORKS

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ABSTRACT

In the recent years, the development of wireless network technology has been improved and there are so many researches undergoing in Vehicular Ad hoc Network. VANET has reached the greatest attention in the world. In VANET the velocity of carriers in the vehicle is high so it is very efficient to forward data and there are so many researchers are planned to develop routing protocol. The proposed routing algorithm is used to simulate in the distributed environment. The main purposes of this routing strategy are designed and develop the sustainable routing with better efficiency and adaptability. This proposed scheme uses geographic position based routing protocol and in that position based routing we using GpsrJ+ algorithm and it is adopted by VANET technology. Due to development of countries the vehicle travel in non-ordered distribution, so we are using GPSR greedy mode to forward packets and this mode fails often and it needs recovery mode or perimeter mode. This GPSR greedy mode always fails and it is worth for forwarding packets. So the proposed enhanced GpsrJ+ mode overcomes the disadvantage of GPSR and GPCR. This proposed system gives good packet delivery ratio by simple modification of the process. This system uses greedy mode on straight roads and intersection mode on intersection and it works intelligently because it can identify the direction of node and it effectively find the shortest path of the destination to send data packets. Finally GprsJ+ does not need expensive planarization strategy and it reduces hop count effectively. The unnecessary hop count and routing overload are avoided in the enhanced proposed routing protocol.

ABSTRAK

Dalam tahun-tahun kebelakangan ini, pembangunan teknologi rangkaian wayarles telah bertambah baik dan terdapat banyak kajian yang menjalani dalam Rangkaian kenderaan ad hoc. VANET telah mencapai perhatian yang terbesar di dunia. Dalam VANET halaju pembawa di dalam kenderaan itu adalah tinggi jadi ia adalah sangat berkesan untuk mengemukakan data dan terdapat begitu banyak penyelidik merancang untuk membangunkan protokol routing. Algoritma routing yang dicadangkan digunakan untuk mensimulasikan dalam persekitaran yang diedarkan. Tujuan utama strategi routing ini direka dan membangunkan routing mampan dengan kecekapan yang lebih baik dan penyesuaian. Ini skim yang dicadangkan menggunakan kedudukan geografi berasaskan routing protokol dan dalam kedudukan itu berdasarkan laluan kami menggunakan algoritma GpsrJ + dan ia diguna pakai oleh teknologi VANET. Disebabkan pembangunan negara perjalanan kenderaan dalam pengagihan bukan supaya, jadi kita menggunakan mod GPSR tamak untuk mengemukakan paket dan mod ini gagal sering dan ia perlu mod pemulihan atau mod perimeter. Ini mod tamak GPSR sentiasa gagal dan ia adalah bernilai untuk penghantaran paket. Jadi yang dipertingkatkan yang dicadangkan GpsrJ + mod mengatasi kelemahan GPSR dan GPCR. Sistem yang dicadangkan ini memberikan nisbah penyerahan paket yang baik oleh pengubahsuaian mudah proses. Sistem ini menggunakan mod tamak di atas jalan yang lurus dan mod persimpangan di persimpangan dan ia berfungsi bijak kerana ia boleh mengenal pasti arah nod dan ia berkesan mencari laluan terpendek destinasi untuk menghantar paket data. Akhirnya GprsJ + tidak memerlukan strategi planarization mahal dan ia mengurangkan hop mengira berkesan. Kiraan hop yang tidak perlu dan beban laluan dielakkan dalam protokol routing dicadangkan dipertingkatkan.