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Performance analysis of DYMO and DSR protocols under variation of DSSS rate (Conference Paper)

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Abstract

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MANET or mobile adhoc network is that network which is infrastructure less and does not need any centralized support. In this network, mobile nodes are equipped with CSMA/CA (carrier sense multiple access with collision avoidance) transceivers and communicate with each other via radio. This network is a kind of temporary network and is best suited for emergency purposes. Since, nodes are always on the move in MANET, routing and protocol selection is considered as one of the most difficult task due to changing network topology. In this paper, performance analysis of two reactive protocols known as DYMO (dynamic Manet on demand) and DSR(dynamic source routing) based on the variation of CBR traffic and DSSS(direct spread spectrum) rate is studied for key network performance metrics which are throughput, end-to-end packet delay and jitter using QualNet 5.1 network simulator. DYMO is one of the most popular reactive routing protocol and has been standardized by IETF MANET WG.To the best of our knowledge, no one has studied the effect of DSSS rate for the mentioned protocols. © 2014 IEEE.

Author keywords

CBR DSR DSSS rate DYMO IEEE 802.11 MAC MANET Mobile-Adhoc networks Performance evaluation
Wireless networks

Indexed keywords

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