Abstract

In most of dynamic Ad hoc sensor wireless applications (e.g. military networks, vehicular ad hoc networks, wild life tracking sensor network), it is not possible to sustain an uninterrupted path from source to destination. Hence the traditional routing strategies (TCP/IP) cannot be deployed as they have to establish complete path before transmission.

DTN (disruption-tolerant network) has emerged as technology which enables the communication by intermittently connected nodes. A node in DTN may not able to transmit all messages from its forwarding queue due to limited transmission duration, dynamic topology
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changes and network partitioning. Therefore, the order in which the messages are forwarded becomes very important.

In this paper we propose a new message forwarding queue mode to optimize the performance of Epidemic router in terms of delivery probability. This technique is called as Transmit smallest message first (TSMF). Through simulations we prove that proposed queue mode (TSMF) outperforms well as compared to existing FIFO and RANDOM.

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