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
Optimization of Epidemic router by new forwarding queue mode TSMF

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) out performs well as compared to existing FIFO and RANDOM.

Reference

- Philo Juang, Hidekazu Oki, Yong Wang, Margaret Martonosi, Li-Shiuan Peh, and Daniel Rubenstein. Energy-efficient computing for wildlife tracking: Design tradeoffs and early experiences with zebranet. In Proceedings of Tenth International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS-X), San Jose, CA, October 2002.

**Index Terms**

Computer Science

Networks

**Key words**

Disruption Tolerant Networks

Epidemic router

Forwarding queue mode