Abstract

The basic philosophy behind Routing in delay tolerant networks (DTNs) is to design routing protocol that maximizes the overall routing efficiency in a network independent of the underlying Transmission and Switching technology & topology for adhoc environment, and the application environment as well. Most designers approach to solve the real world problem by creatively engineering, enabling higher delivery rates with least overhead and optimized resource consumption – Green IT. In this paper the authors study, investigate, pen, and summarize in some detail various routing techniques starting from its evolution and gradually building up newer approach to address complex problems. We discuss and present general aspects relating to role of mobility models, investigate and study routing under specific environment such as application and for adhoc network and finally, we also attempt to explore the possibility to generalize routing by designing algorithm that would work in a complex and dynamically changing environment; adhoc in particular. Summary of a few strategic models showcasing the attributes relating to forwarding and replication techniques is also tabled.
Reference

- Erasure-coding based routing for opportunistic networks. Yong Wang, Sushant Jain, Margaret Martonosi, Kevin Fall. s.l. : ACM, 2005. ACM SIGCOMM workshop on
Delay-tolerant networking. pp. 229 - 236.

Index Terms

Computer Science

Wireless Networks

Key words

forwarding

replication

single copy

multicopy

relay

delivery ratio

delay

throughput
Evolution of Routing techniques, routing protocols and routing efficiencies for Delay Tolerant Network