Abstract

In MANET broadcasting is a virtual role which covers the neighbour to reach destination, its resolves many issues in Mobile Ad hoc Network. Dynamic change of radio frequency leads to un-covered neighbour search in network. In this re-broadcasting cause's congestion among radio signals, it overlap the neighbour coverage and initiates the flooding and results in redundancy, Routing Overhead, and collision in MAC layer, In particular, due to mobility environment in network link failure and neighbour coverage problem e. g. , (radio frequency or) bandwidth congestion occur. Collision avoidance is a storm difficult in network, thus MAC follow a Carrier Sense Multiple Access / Collision Avoidance (CSMA/CA) mechanism in MAC layer design to improve the channel allocation of data transmission. We proposed a protocol (RBNC) Rebroadcasting Neighbour Coverage protocol which reduces the high channel contention causing redundant and reduce routing overhead by Retransmissions. Routing path can be reduced using the delay tolerant (DTN) of intermediate nodes (i. e. the number of RREQ packets transmitted during route discovery is reduced). Our protocol is simulated in NS2 and the performance is evaluated and the rebroadcasting is analytically discussed.
References

- Xin Ming Zhang, En Bo Wang, Jing Jing Xia, and Dan Keun Sung, "A Neighbour Coverage based Probabilistic Rebroadcast for Reducing Routing Overhead in Mobile Ad hoc Networks," Mobile Computing, IEEE Transactions on Vol. 11, No. 1, Jan, 2012
- Ns2 Reference from http://networksimulation.wordpress.com/
Rebroadcasting Neighbour Coverage Routing Protocol in MANET using MAC layer Design


Index Terms

Computer Science Wireless

Keywords

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