Manuscript ID : 00000-66264

International Journal of Research in Computer Applications & Information Technology

Volume 3, Issue 1, January-February 2015, Pages 12-20, Page Count - 9

### Performance Improvement in Adaptive Routing Strategy in Mobile Adhoc Network

Samina Anjum <sup>(1)</sup> Sapna Khapre <sup>(2)</sup>

<sup>(1)</sup> Department of Computer Science and Engineering, G H Raisoni Academy of Engineering and Technology, Nagpur, Maharashtra, India.
<sup>(2)</sup> Department of Computer Science and Engineering, G H Raisoni Academy of Engineering and Technology, Nagpur, Maharashtra, India.

#### Abstract

It has been a big challenge to develop a routing protocol that can meet different application needs and optimize routing paths according to the topology change in mobile adhoc networks. Based on their forwarding decisions only on the local topology, geographic routing protocols have drawn a lot of attention in recent years. In routing, nodes need to maintain up-to-date status of their immediate neighbors for making effective forwarding decisions. The periodic broadcasting of beacon packets that contain the geographical location coordinates of the nodes is a popular method used by most routing protocols to maintain neighbor status. Each node can determine and adjust the protocol parameter values independently according to different network environments, data traffic conditions and node's own requirements. The project offers the Adaptive Status Update strategy for routing, which dynamically adjusts the frequency of status updates based on the mobility dynamics of the guests and the forwarding patterns in the network based on nodes whose movements are harder to predict update their status more frequently, and nodes closer to forwarding paths update their Status more frequently.

#### **Author Keywords**

Ad hoc on Demand Distance Vector (AODV), Distance Source Routing (DSR), Mobile Ad Hoc Network (MANET)

ISSN Print: 2348-0009 Source Type: Journals Publication Language: English Abbreviated Journal Title: IJRCAIT Publisher Name: IAEME Publication Major Subject: Physical Sciences Subject area: Computer Networks and Communications

#### References (13)

1. W. Su, S.J. Lee, and M. Gerla Mobility prediction and routing in ad hoc wireless networks

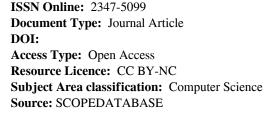
(2001) International Journal of Network Management,

 D. Son, A. Helmy, B. Krishnamachari The Effect of Mobility-Induced Location Errors on Geographic Routing in Mobile Ad Hoc

(2004) IEEE Transactions on Mobile Computing, Volume 3, Page No 233-245,

3. David B. Johnson, David A. Maltz, and Yih-Chun Hu







Source ID : 0000087

The Dynamic Source Routing Protocol for Mobile Ad Hoc Networks (DSR)

(2004) Internet-draft, 4. C. Perkins and S. Das Ad-hoc on-demand distance vector (AODV) routing (2003) Network Working Group, 5. Natarajan Meghanathan and Levon Paul Judon Improvement in Network Lifetime for OnDemand Routing in Mobile Ad hoc Networks Using either On-Demand Recharging or Transmission Power Control or Both (2010) Computer and Information Science, Volume 3, Issue 1, Page No 3-11, 6. Ankit Bhardwaj, Divya and Sanjeev Sofat An Efficient Energy Conserving Scheme for IEEE 802.11 ADHOC Networks (2007) Volume 3, Issue 7, 7. M. Pushpalatha, Revathi Venkataraman and T. Ramarao Trust Based Energy Aware Reliable Reactive Protocol in Mobile Ad Hoc Networks (2009) World Academy of Science, Engineering and Technology, Page No 356-359, 8. Elizabeth M. Royer, Chai-Keong Toh, A Review of Current Routing Protocols for AdHoc Mobile Wireless Networks (1999) IEEE Personal Communications, Volume 6, Issue 2, Page No 46-55, 9. C. E. Perkins et al., Ad hoc On-Demand Distance Vector (AODV) Routing (2002) 10. J. Li. et al., A Scalable Location Service for Geographic Ad Hoc Routing (2000) Proceedings of the 6th annual international conference on Mobile computing and networking, Page No 120-30, 11. Z. J. Haas and B. Liang Ad Hoc Mobility Management with Uniform Quorum Systems (1999) IEEE/ACM Transactions on Networking, Volume 7, Issue 2, Page No 228-40, 12. E. Ahvar and M. Fathy Performance Evaluation of Routing Protocols For High Density Ad Hoc Networks based on Energy Consumption by Glomo Sim Simulator (2007) World Academy of Science, Engineering and Technology, Volume 23,

 P. Sivasankar, Dr. C. Chellappan, S. Balaji Performance of Energy Efficient Routing Protocol for MANET

(2011) International Journal of Computer Applications, Volume 28, Issue 8, Page No 1-6,

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