Abstract

Mobile Ad-hoc Networks (MANET) are consisting of nodes that have limited battery power so the energy efficiency is one of the primary metrics of interest. Energy efficient routing is a major issue in MANET. This paper proposed an Energy efficient power aware multipath dynamic source routing protocol by modifying one of the most popular routing protocols that is Dynamic Source Routing (DSR) protocol which is not at all concerned about power consumption. The proposed Dynamic source routing-Power Aware routing DSR-PSR uses the basic concept of traditional DSR and implements energy efficient routing through which it not only enhances the life time of the network but also increases the overall performance of the networks.
Energy Efficient Power Aware Multipath Dynamic Source Routing

- Magnus Frodigh, Per Johansson, Peter Larsson (2000) "Wireless ad hoc networking-the art of networking without a network";
- Imrich Chlamtac, Marco Conti, Jennifer J. -N. Liu &quot;Mobile ad hoc networking: imperatives and challenges"; Elsevier 2003
- Ram Ramanathan and Jason Redi; &quot;A brief overview of ad hoc networks: Challenges and directions"; BBN Technologies, IEEE Communications Magazine 50th Anniversary Commemorative Issue May 2002
- Ad hoc On-Demand Distance Vector (AODV) Routing July 2003 http://www. ietf. org/rfc/rfc3561. txt
- S. Chettibi and m. Benmohamed, &quot;A multipath energy-aware on demand source routing protocol for mobile ad-hoc networks&quot;; computer sciences dept. , university mentouri of constantine, algeria.  2009
- Meng Li, Lin Zhang, Victor O. K. Li, Xiuming Shan, Yong Ren , &quot;Energy-aware multipath routing protocol for mobile ad hoc networks&quot; Department of Electronic Engineering Tsinghua university, ACM Sigcomm Asiaapos;05, Apr. 10-12, 2005, Beijing, China
- Morteza Maleki, Karthik Dantu, and Massoud Pedram, &quot;Power-aware source routing protocol for mobile ad hoc networks&quot; Dept. Of ee-systems, University of Southern California, Los Angeles IEEE conference 2002 page 72-75
- Giampaolo Bella, Gianpiero Costantino, Jon Ccrowscroft, &quot;Enhancing DSR maintenance with power awareness&quot; Salvatore Riccobene department of mathematic and Informatics, Italy 2012 Elsevier B. V.
- Carla F. Chiasserini, Ramesh R. Rao &quot;Routing protocols to maximize battery efficiency&quot; Department of electronics, Italy MILCOM 2000. 21st Century Military Communications Conference Proceedings page 496-500
- Ram Ramanathan, Regina Rosales-Hain, &quot;Topology Control of Multihop Wireless Networks using Transmit Power Adjustment&quot; Internetwork Research Department BBN Technologies (A Division of GTE) Cambridge, Massachusetts IEEE 2000
- Jae-Hwan Chang and Leandros Tassiulas &quot;Energy Conserving Routing in Wireless Ad-hoc Networks&quot; IEEE 2000
- Vinay Rishiwal, Mano Yadav, S. Verma, S. K. Bajapai &quot;Power Aware Routing in
Index Terms

Computer Science
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Keywords

Dynamic source routing protocol  DSR  energy efficient routing  Energy efficient dynamic source routing.