Abstract

Power aware routing is the effective way to increase the life span of nodes having limited battery power in ad hoc networks. In MANET, Energy consumption is a significant issue since all of the mobile nodes are battery powered due to which lifetime of a network is restricted. In order to prolong the lifetime of ad hoc networks, the energy consumption of nodes should be minimized sincerely, exhaustion of energy of a single node causes link breakage in a network. In this paper, energy conscious routing procedures are analysed and an algorithm is proposed with simulation in MATLAB that will help to enhance the lifetime of network. Genetic algorithm gives the random solutions from the generations of paths and achieves the optimized performance. From the tentative consequences, it is resolved that network will be more energy efficient as compared to the earlier energy efficient algorithms.

References

1. S.J. Lee, M. Gerla, and C.-K. Toh, "A Simulation Study of Table-Driven and On-Demand
8. S. SankaraGomathi, S. Krishnamurthi, Richard Chbeir(2003) “Design of Extended Optimal Energy Drain Rate Algorithm for Mobile Ad-hoc Network” from department of computer science and electronics and communication from Sri Venkateswara College of Engineering and Anna University
Index Terms

Computer Science

Wireless

Keywords

MANET, energy aware routing, genetic algorithm