Abstract

In recent decades, numerous attempts have been made on routing the data in mobile ad hoc networks efficiently. Subsequently, several specialists have provided distinct routing protocol for ad hoc networks, especially routing protocols using the concept of multiple paths such as AOMDV. Carefully designed multipath routing protocols promise congestion avoidance, load balancing, improved throughput, fast recovery from link failures hence a more robust network, and a better utilization of the network resources. Various multi path routing protocols have been proposed with aim to minimize the energy utilization in mobile ad hoc networks such as Enhanced Energy Efficient AOMDV. The paper enlightens the critical issue of lowering the routing overhead while preserving the energy consumption in mobile ad hoc networks. The paper presents routing scheme where ratio of residual energy of the nodes and distance is taken into account while making multiple paths between source and destination and further presents a comparison of performance of Enhanced AOMDV and proposed approach.

**Index Terms**

Computer Science  
Networks

**Keywords**

Mobile ad hoc network  AOMDV  E-AOMDV  multi path routing.