Implementation of stable energy based load balancing protocol for manet

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Abstract

In general, mobile nodes consume more energy than the sensor nodes due to the presence of mobility. If the path stability is not maintained properly, network partition will occur. From the analysis of the previous work, the load balancing of energy routing is not established well. It leads to network performance degradation. In this work, Efficient Energy based Load Balancing Routing Protocol (EELBP) is proposed to make a balance between load balancing and energy consumption. The main aim of the proposed work is to reduce energy consumption and provide better stability using the stability model. The proposed scheme consists of three phases like Load balanced Routing, stability of path and energy consumption model. Multipath routing is developed to ensure better network lifetime and more energy efficiency. The multipath routing stability is calculated to ensure more network stability. Energy spent for transmission is reduced using the energy consumption model. By simulation results the proposed algorithm EELBP achieves better performance in terms of packet delivery ratio, delay, overhead, network lifetime, energy consumption link availability than the existing method PLSS and LAER schemes.