Abstract

The sensor nodes in WSN (Wireless Sensor Network) are energy dependent and each and every functioning is only possible to exhaust some amount of power or energy. The WSN is decentralized network and nodes are free to move in limited radio range for communication. The routing protocol is performing important role for communication and better routing strategy is reduces the energy consumption and enhances the utilization of energy. LEACH is the energy efficient protocol and this protocol is only designed for energy based routing. In this paper we proposed a new multipath routing strategy with higher energy node selection scheme for selection of Cluster Head (CH) and route establishment. The performance of proposed LEACH protocol is compare with normal LEACH protocol in WSN. The energy utilization of nodes is improves if the possibility of link breakage is reduced and the proposed energy approach is established strong link in dynamic network. The proposed scheme ignores the shortest path routing procedure but established the reliable path in between source to destination. The packet retransmission is consumes the lot of extra energy for sending or forwarding the same data and also not sure, in next time data is successful deliver to
destination. The multipath routing is improves the reliability of link in terms of mobility. If the node/s is the part of link and goes to out of range then instantly the alternative route is present for data delivery in dynamic network. The network performance is measure through performance metrics like throughput, routing overhead and number of survive nodes in dynamic network.

References

12. The Network Simulator – ns-2 http://www.isi.edu/ nsnam /ns/

Index Terms

Computer Science Communications
Keywords

LEACH, Proposed LEACH, Multipath, Routing, Energy, WSN.