Abstract

Wireless sensor networks (WSN) represent a new paradigm shift in Adhoc networks. Wireless Sensor Networks consists of small nodes with sensing, computation and communication capabilities. The sensor networks task is to sense the environment, and relay the information back to a remote base station, where the user can access it. Sensor nodes are deployed in a monitoring region to gather information on environments like temperature, humidity, position, sound etc. Many routing protocols have been specifically designed for Wireless Sensor Networks where energy awareness is an essential design issue. Overall, the routing techniques are classified into three categories based on the underlying network structure: flat, hierarchical and location based routing. Energy Conservation is the major issue in distributed wireless sensor network. A new approach of Optimal Energy Efficient Clustering Algorithm (OEECA) is proposed in this paper. Also, we compare OEECA (proposed approach) with LEACH (Low
Energy Adaptive Cluster Head) Routing Algorithm. Comparison is based on Energy consumption, Selection of Cluster-Head node and Sending data’s to the Base-station. From this Comparison study, we predict that, OEECA algorithm is better in the case of consuming less energy by the cluster-nodes, selection of Cluster-head and sending more data’s consumes less energy as efficient than LEACH.

Reference

- "Ns-2 network simulator," ttp://www.isi.edu/nsnam/ns/,

Index Terms

Computer Science Wireless
Key words

Sensor networks  routing protocol  energy

network structure

monitoring region