Abstract

When designing a protocol for data aggregation two things need to be considered; data reliability and energy efficiency. A good data aggregation protocol is one that achieves high data reliability using the least amount of overhead as possible. In case of wireless sensor networks (WSNs), data aggregation is widely accepted as an essential pattern for energy efficiency. In
this paper, we propose An Energy Efficient Interest Based Reliable Data Aggregation (EIRDA) Protocol for WSNs. EIRDA effectively delivers the data to the sink. In EIRDA, we consider static clustering scheme for the uniform distribution of sensor nodes (SNs) in each cluster. Simulation result shows that EIRDA is efficient in terms of energy and achieves higher reliability.

Reference

- Hong Luo, Qi Li, Wei Guo, RDA: Reliable Data Aggregation Protocol for WSNs, IEEE 2006
- Baobing Wang, Xiaohua Jia and Xiaodong Hu. “Reduce Data Aggregation Latency by Using Partially Overlapped Channels in WSNs” Submitted to IEEE Transactions on Wireless Communications.
10.1109/TMC.2007.1011.

Index Terms

Computer Science Wireless

Key words

Sensor Networks MAC protocol Data
aggregation Static Cluster.