Abstract

In wireless sensor networks the nodes which are near to the sink node operate as intermediate node. The source nodes will generate events as per the frequency provided to them and forward packets to the sink through intermediate nodes. The sink node could not able to collect data packets reliably since excessive number of packets drop at intermediate nodes in congestion situations. An efficient storage mechanism needed to store the packets as well to diminish packet loss. The objective of the current work is to enhance reliable data collection at sink node by using intermediate storage nodes to alleviate congestion problem in wireless sensor network. In this paper we present a typical database file attached model in vicinity to data packets storage at cluster head nodes. An attached storage database file to cluster head node will advantageous in storing data packets dropped during transmission. The dropped packets are recollected by the cluster head node from attached database file on getting negative acknowledgement from sink. The recovered data packets sent back to the sink node which will diminish packet loss. Consequently, reliable data collection is achieved at sink node.
References


Index Terms

Computer Science Wireless

Keywords

WSN  Wireless Sensor Networks  PDR  Reliability