Abstract

This research work is based on IEEE 802. 15. 4/ Zigbee wireless sensor network. The main aim of this research is to analyze the performance of Zigbee network topologies in beacon enable mode by giving the random waypoint mobility model to its nodes. The scenarios have investigated the performance of network by varying speed and mobility of nodes. Results are evaluated using parameters throughput, data traffic sent and data traffic received and number of hops. The simulation is done by OPNET modeler 14. 5. The results conclude that tree topology give good performance in case of data traffic sent and data traffic received, the throughput is also efficient. Hence tree topology constructs a robust network using mobile nodes.

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Deviation of Mobile Nodes in Beacon Enable Zigbee Sensor Network

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Index Terms

Computer Science  Communications
Keywords
WSN  Zigbee  CSMA/CA  Mobility  Topologies.