Abstract

This research work is implemented in ZigBee using IEEE 802.15.4 protocol stack, it is most widely used technique in wireless sensor network for low rate wireless personal area network. In this paper three topologies are used i.e. mesh, tree and hybrid topology. The hybrid topology is implemented by using the combination of mesh and tree topology. The data-based setup is done by changing mobile percentage of nodes. The performance of these topologies is measured using parameters throughput, MAC delay, DTR and DTS. The results quantify that hybrid topology is best among other two topologies as it provides high throughput, high DTR and DTS. The simulation is done by OPNET modeler 14.5.
Examine the Performance of different Topologies using Opnet 14.5 in ZigBee Sensor Network


Index Terms

Computer Science
Networks

Keywords
ZigBee  OPNET Modeler  DTR  DTS.