Abstract

In order to improve the control overhead and to achieve the reliable data transmission in the patient monitoring system based on ZigBee, here the concentration is given on the comparative performance evaluation of different routing algorithm in a wireless body area network (WBAN) using the OPNET simulation tools. WBAN contains the number of wireless mobile nodes forming an unpredictable topology and link instability that make routing a core issue. This paper provides a relative analysis of AODV, DSR, and OLSR routing protocols with increasing number of wireless nodes in WBAN on the basis of end to end delay, load, and throughput. Simulation results demonstrate that OLSR routing protocol is performing best amongst all protocols under an increasing number of node scenario.

References

- Jamil Y. Khan, Mehmet R. Yuce and Farbood Karami, "Performance evaluation of wireless body area sensor network for remote patient monitoring"; 30th annual
Performance Evaluation of Patient Monitoring System With Different Routing Protocols

- Lingwei Zhang, Hanjun Jiang and Jainjun Wei, "A reconfigurable sliding IF tranceiver for 400 MHz/ 2.4 GHz IEEE 802. 15. 6/ ZigBee WBAN hubs with only 21% tuning range VCO" IEEE journal of solid state circuits, vol. 48, NO. 11, November 2013.

Index Terms

Computer Science Wireless
Keywords

Throughput  end to end delay  load  control overhead.