Abstract

In this paper the effect of mobility of nodes at different trajectories have been analyzed on zigbee Mesh topology. Different Trajectories used are Helbert space-filling curve, hexagon trajectory and square trajectory. The effect is analyzed in terms of Throughput, Packet Loss and Media Access Delay. Results have been analyzed once by keeping 32 nodes fixed and all others moving at speed of 5 m/sec and 7 m/sec and secondly by moving 32 nodes at speed of 5m/sec and 7 m/sec and keeping all other nodes fixed. When 32 nodes are kept fixed and all other nodes are moving it has been concluded that the hexagon trajectory performs better as compare to square trajectory. Further it has been investigated that when 32 nodes moves and all other nodes are kept fixed, the performance of square trajectory is better at speed of 5 m/sec and the performance of helbert curve is better at speed of 7 m/sec.

References


Index Terms

Computer Science Networks
Keywords

WSN, ZigBee, 802.15, OPNET