Abstract

The network in which a large number of small and low-cost sensor nodes are randomly deployed is called Wireless Sensor Network (WSN). These sensor nodes can collectively monitor physical and environmental conditions like pressure, temperature, humidity etc. Issues in WSN are Energy Efficiency, Reliability, Production Cost, Security, etc. Security is one of the major concerns in the network. A sensor network must achieve all security goals like availability, freshness, integrity etc. AODV is a reactive routing protocol in which the establishment of the route takes place only when there is demand for new routes. A novel hybrid black/grey hole detection and prevention approach is proposed for detecting and preventing both the black and grey hole attacks in Ad hoc On-demand Distance Vector Routing (AODV) protocol for WSN. In this research work, we will be implementing the AODV routing protocol using WSN. The work presented in this thesis adopted a hybrid trace-back approach in which packet marking and packet logging are integrated. Experimental results show that the proposed hybrid approach detects and eliminates the attacks effectively with better throughput, delay, load and jitter.
References


Index Terms

Computer Science Wireless

Keywords
