Abstract

Wireless networks are usually deployed in hostile environment where an adversary can masquerade some internal nodes which may launch various inside attacks which may leads to reduction in network performance. Although the identity of a node can be verified through cryptographic authentication, conventional security approaches are not always desirable because of their overhead requirements. In this paper one method is used based on spatial correlation of Received signal strength of each node to find out the presence of attack and a cluster based mechanism is used to find out number of attackers. An efficiency based RADAR gridded algorithm is used further to localize the no of attackers in the network. Experimental evaluation is carried out using two test simulations of IEEE 802.11 and Zigbee networks. The comparison shows that the packet overheads are lesser as compared to other schemes. It has been observed that packet delivery ratio and end to end delay increases as increase number of nodes while energy decreases with optimal point.
Analysis of Detection of Multiple Attackers in Wireless Networks


Index Terms

Computer Science

Security
Keywords
  Wireless Network Security  Attack Detection  RSS value  Localization