Detection of Clone Attack in Mobile Wireless Sensor Network

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Abstract

Wireless sensor nodes has been used for the sensing the information from harsh environment. In these nodes sensors of different types has been used for collecting information. In MWSNs the main threat in the network is security. Various types of attacks occurred in these networks. Attack occur in WSN is clone attack which is also known as replica attack. In this attack the node copy the id of the other node and show its predictions at different locations. A clone node can create a black hole or wormhole attack include adversary can use them in different ways. This attack can transmit false information to all legitimate nodes. The clone attack is very suitable for adversary. For this attack adversary has not to be compromise for number of nodes. Main problem in this is to detect the node having clone attack, because each and every node has same id and locations at different position on same interval of time. We can remove this clone attack by using witness approach algorithm. In the presented paper, four parameters are generated i.e Packet Loss, Packet Delay, Packet Delivery Ratio, Throughput and on the basis of these parameters we conclude that our system gives us better performance.
References

9. Sivasankar, P.T.; Ramakrishnan, M. “Active key management scheme to avoid clone attack in wireless sensor network”

Index Terms

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Keywords

Leach, HEED, WSN, MWSN