Abstract

In this new millennium most of the transactions depend on wireless network. In this context highly secured transaction of information is the need of the hour. During the transaction there must not be any loss of information or there should be no intrusion to assure the secured data transmission. There are several approaches available for fixed network threats. But it is difficult to analyze the intrusion attacks in mobile networks due to its high mobile nature. In this present work we implemented a simulation tool to handle intrusion attacks in Mobile Ad Hoc Network (MANET). Using that we analyzed Route Disturbance, Node Isolation, Resource Consumption, Denial of Service (DoS) and Man in the Middle attacks. Using our approach it is easy to reduce throughput, easy to increase security, easy to avoid unauthorized intruders and also it is easy to avoid packet losses.

The implemented wireless intrusion detection system has been simulated using JAVA
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Platform. Our tool Mobile Intrusion Detection Controller (MIDC) is combined with the existing Ad Hoc On-demand Distant Vector (AODV) routing protocol. It is used to detect and magnify various attacks in a mobile network. These attacks have been simulated and performed using hacker software in java platform. It also includes an additional recovery phase to overcome threats and intruders.

Reference

- Karygiannis, A. and Antonakakis, E. mLab: A Mobile Ad Hoc Network Test Bed. 1st

Index Terms

Computer Science Wireless networks

Key words

MANET attacks

detection

node isolation

route disruption

resource consumption

ADODV

MIDC

DoS

Man in the Middle Attack
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