Abstract

Wireless networks have become so popular in recent years that now a day almost every electronic gadget can be operated in wireless. Wireless ad hoc network is more vulnerable to security threats than wired network due to inherent characteristics and system constraints. This paper mainly addresses attacks due to misbehaving or malicious nodes. We have examined the effect of Black Hole attack on AODV routing and its detection method. I have simulated this attack and determined effect of this attack on network performance by different network scenario. I have also implemented detection method that help to isolates the malicious node in the network.

References

2. Geng Peng, Zou Chaanyun "Routing Attack and Solutions in Mobile ad hoc Network"
Analysis of Black Hole Attack in MANET using AODV Routing Protocol

IEEE-2006.


8. Preventing Black Hole Attack in Mobile Ad-hoc Networks Using Anomaly Detection by Yibeltal Fantahun Alem & Zhao Hheng Xaun from Tainjin 300222, China 2010, IEEE.


12. A Simulation Study of Malicious Activities under Various Scenarios in Mobile Ad hoc Networks (MANETs) by Akshai Aggarwal, Nirbhay Chaubey and Keyurbhai A Jani from Gujrat, India 2013, IEEE.


Index Terms

Computer Science Wireless

Keywords

Sequence number, AODV Protocol, Black Hole Attack