Abstract

As the progression of networks continues, Mobile ad hoc network (MANET) has become as a new frontier of technology to give anywhere, anytime communication. Because of the features like unreliability of wireless links between nodes, dynamic topology, limited battery power, lack of centralized control and others, the mobile ad hoc networks are more vulnerable to suffer from
the malicious behaviors than the traditional wired networks. The topology of an ad hoc network is defined by the geographical positions and the transmission ranges of the nodes. The Prevention methods like, Firewalls, authentication and cryptography techniques alone are not able to provide the security to these types of networks. Therefore, efficient intrusion detection must be deployed to facilitate the identification and isolation of attacks. In this paper we have discussed an Intrusion detection system for Mobile Ad-hoc Networks using a hybrid approach which consists of local as well as global detection using reactive and proactive protocols.

Reference

3. Foong Heng Wai, Yin Nwe Aye, Ng Hian James” Intrusion Detection in Wireless Ad-Hoc Networks” CS4274 introduction to mobile computing.
9. Ioanna Stamouli, Patroklos G. Argyroudis, and Hitesh Tewari "Real-time Intrusion Detection for Ad hoc Networks" Proceedings of the Sixth IEEE International Symposium on a World of Wireless Mobile and Multimedia Networks (WoWMoM’05), 0-7695-2342-0/05 $20.00 © 2005 IEEE.
17. Yinan Li, Zhihong Qian –“Mobile agents-based intrusion detection system for mobile adhoc network” , PP- 145, 30,31 Jan, 2010 (ICCC-ITOE) .
18. NS-2 Simulator. URL: http://www.isi.edu/nsnam/ns.

Index Terms

Computer Science
Security

Key terms

Mobile Ad-hoc Network
Security

attacks

Intrusion Detection

local

global
reactive
proactive
hybrid