Abstract

Mobile Ad hoc Network (MANET) is a group of wireless nodes that cooperatively form a network without any pre-established or centralized infrastructural support. All the nodes in the network are moving independently within the same radio range and acts as hosts as well as routers. This network is vulnerable to number of attacks while doing data transmission throughout the network. MANETs are more vulnerable to attacks than traditional wired networks because mobile ad hoc network operates on different principles than that of the traditional networks. Security up to some extent is achieved by existing security mechanisms. To achieve acceptable level of the security, the existing security mechanisms should be combined with intrusion detection systems (IDS). There are some existing intrusion detection systems based on
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acknowledgement, but under certain circumstances these existing systems will not be able to detect the presence of malicious nodes effectively. So, a novel intrusion detection system called Secure Enhanced Adaptive Acknowledgement (SEAACK) is proposed in this paper. The proposed system deals with the issues related to the existing IDS and detect the malicious nodes more effectively than the existing system under certain circumstances while not greatly affecting the network performances.

References

- Digital signature, URL: http://cr. yp. to/ecdh. html

Index Terms

Computer Science

Wireless
Keywords
Manet   Secure Acknowledgement   Cryptography   False Misbehavior   Intrusion Detection.