Abstract

A Mobile Ad-Hoc Network (MANET) is a collection of mobile nodes communicating in a multi-hop way without any fixed infrastructure such as access points or base stations. Mobile ad hoc networks have several advantages over the traditional wired networks, on the other sides they have a unique set of challenges like MANETs face challenges in secure communication, mobile nodes without adequate protection are easy to compromise, static configuration may not be adequate for the dynamically changing topology in terms of security solution and finally, lack of cooperation and constrained capability is common in MANET. MANET has not well specified defense mechanism, so malicious attacker can easily access this kind of network. Although security issues in Mobile Ad-hoc Networks (MANETs) have been a major focus in the recent years, the development of most secure schemes for these networks has not been entirely achieved till now. This research paper will provide an overview about the security issues and available detection techniques in Mobile ad hoc networks. In this research paper, we will identify the existent security threats an ad hoc network faces, the security services required to be achieved and the countermeasures for attacks.
Analysis of Security Threats and Vulnerabilities in Mobile Ad Hoc Network (MANET)

References


- Securing Vehicular Ad Hoc Networks (2007) by Maxim Raya and Jean-Pierre Hubaux, School of Computer and Communication Sciences, EPFL, Switzerland.


Index Terms

Computer Science  Mobile Networks

Keywords

MANET  Security Threats  Denial of Service (DoS)  Passive & Active Attack