Improving Performance of Neighbor Discovery in MANET by using Threshold Value and Time Out Parameter

International Journal of Computer Applications
© 2014 by IJCA Journal

Volume 99 - Number 10
Year of Publication: 2014

Authors:
Anuradha T. Thakre
Sandeep Kadam

10.5120/17413-7997

Abstract

In Mobile Ad Hoc network (MANET), various protocols and known location services that are used keeps growing, it is necessary for MANET mobile nodes to identify their neighbor’s position for effective and truthful communication. However, this MANET process is quite negotiable by attacking mobile node and retrieving their information of respective locations in MANET. Hence it is very essential to have proficient method of discovering neighbors to avoid such attacks for high level security. In recent days, various methods are presented for verifying neighbor positions, but those methods absorbs few limitations with respect to performance. In this paper, “Improving Performance of Neighbor discovery In MANET by Using Threshold value and Time out parameter” the protocol offers false positive and false negative rate improvement within the existence of various attacks for improving the performance of an existing method (NPV) parameters such as; threshold value and time out are introduced. This new protocol fundamentally deals with Mobile Ad Hoc network where a persistent infrastructure is unavailable and the location identification is necessarily learnt via. Node to node communication. Such scenario is highly noticeable because it has a loophole for oppositional nodes to abuse the location based services.

Refer
References

- Sudarshan Vasudevan, Micah Adler, Dennis Goeckel, Fellow, IEEE, and Don Towsley, Fellow, IEEE, ACM, "Efficient Algorithms for Neighbor Discovery in Wireless Networks;.
- Zhensheng Zhang and Bo Li, "Neighbor Discovery in Mobile Ad Hoc Self-Configuring Networks with Directional Antennas: Algorithms and Comparisons;.
- Marco Fiore, Member, IEEE, Claudio Casetti, Member, IEEE, Carla-Fabiana Chiasserini, Senior Member, IEEE, Panagiotis Papadimitratos, Member, IEEE, "Discovery and Verification of Neighbor Positions in Mobile Ad Hoc Networks;.
- In Analysis of Black Hole Attack on MANETs Using Different MANET Routing Protocols, Irshad Ullah, Shoaib Ur Rehman

Index Terms

Computer Science
Communications
Keywords

Ad hoc networks  Neighbor position verification  mobile Ad Hoc Networks  Security

False Positive

False Negative.