Faith based Routing in Mobile Ad Hoc Network

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 143
Number 1

Year of Publication: 2016

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10.5120/ijca2016910012

Abstract

MANET is a collection of wireless mobile nodes that work together by forwarding packets for each other to let them to communicate outside the range of direct wireless transmission or with each other. Secure routing protocols are a crucial area towards security of MANET. The routing solutions for conventional networks are not sufficient to work efficiently in Ad Hoc environment. In this work, we have proposed a scheme to select secure route for data forwarding. This technique will avoid interception of messages through black hole nodes. We have compared our results with DSR routing protocol, the results showed that Faith DSR will avoid routing of packets through black hole nodes. The goal of this work is to provide a simple node based trust management scheme for MANET, an understanding of the properties, which should be considered in developing a trust metric and insights on how a trust metric can be customized to meet the requirements and goals of the network trust management scheme. The model is simple, flexible and easy to be implemented. The proposed routing protocol is compared with DSR protocol and the results are analyzed using the MATLAB.
References


Index Terms

Computer Science       Wireless

Keywords

Manet, secure DSR, secure routing, faith based DSR, blackhole