Abstract

A mobile ad hoc network (MANET) is a collection of mobile nodes forming an instant network with dynamic topology. Each mobile node acts as both router and host simultaneously. Routing protocols address the primary challenge of equipping each device to properly maintain information required to route traffic. Destination Sequence Distance Vector (DSDV) is one of the
network layers routing protocol. Security is not addressed in DSDV making it vulnerable to various attacks. In this paper we discuss Byzantine and Broken Link Fraud in DSDV. We simulate Broken Link Fraud in ns-3 and show the effect of the attack on Packet Delivery Ratio (PDR). We show that PDR drops after the onset of the attack.

Reference

- MANETs. http://en.wikipedia.org/wiki/Mobile_ad_hoc_network
    - Communicated and Accepted, volume IEEE Xplore, February 2011.

Index Terms

Computer Science Information Technology
Key words

MANETs
Byzantine attack
Broken Link Fraud
Denial of Services (DoS)