Abstract

Network nodes function as routers in ad hoc networks forwarding data packets that had its genesis in other nodes for communication extending beyond transmission range. Usually, ad hoc network routing protocols are built to function well in non-adversarial surroundings. Routing protocol security is critical in settings where networks face attacks which disrupt communication.

This paper proposes to simulate/study black hole attack impact in ad hoc networks with DSR routing protocol. The obtained output is the basis for a novel statistical method to identify black hole attack based on RREQ control packet sequence. The proposed method is able to identify black hole attacks in the network and avoid the node during new route discovery.

References


**Index Terms**

Computer Science
Wireless

**Keywords**

Adhoc network network security network attacks Dynamic Source Routing (DSR)