Modified OLSR Protocol for Detection and Prevention of Packet Dropping Attack in MANET

Abstract

The Optimized Link State Routing Protocol is developed for Mobile Ad Hoc Network. It operates as a table driven, proactive protocol. The core of the OLSR protocol is the selection of Multipoint Relays (MPRs), used as a flooding mechanism for distributing control traffic messages in the network, and reducing the redundancy in the flooding process. A node in an OLSR network selects its MPR set so that all two hop neighbor are reachable by the minimum number of MPR. However, if an MPR misbehaves during the execution of the protocol, the connectivity of the network is compromised. This paper introduces a new algorithm for the selection of Multipoint Relays (MPR) whose aims is to provide each node to selects alternative
paths to reach any destination two hops away. This technique helps avoid the effect of malicious attacks and its easily to implement the corresponding algorithm without any additional overhead.

References


Index Terms

Computer Science
Security

Keywords