Black Hole Attack in AODV Routing Protocol using Security Algorithm in MANET

Abstract

Security is the major concern in mobile ad hoc network (MANETs) due to its dynamic behavior. Mobile ad hoc network is the collection of nodes and it is infrastructure fewer networks which means a node can join or leave in network simultaneously. Because of vibrant topology it is more susceptible to different kind of security attack such as Denial of service (DoS), wormhole, replay, masquerade, black hole etc. Such network uses routing protocol to transmit the packet from one end to another and each node behaves as host or router which can select suitable path for transmission of packet. In this, we determine the black hole attack in AODV routing protocol. Black hole is a network attack in which the malicious node advertises itself that it has freshest route to deliver the packet and then discard or drop it. This paper propose black hole attack detection using security algorithm and the simulation of this is perform on NS-2.34 network simulator.

References


**Index Terms**

Computer Science  
Algorithms
Keywords

AODV, MANET, Black hole attack, Security threats, dynamic, Network Simulator