Simulation of Wormhole Attack in Wireless Sensor Networks using AOMDV Protocol

Abstract

Wormhole attack, a resource depletion attack being considered as one of the severe attack in Wireless Sensor Networks (WSN). It can interfere routing process at any time, drain the battery power of sensor nodes and also can disable the whole system. Hence, this work deals with a technique to identify and prevent wormhole attack using Adhoc On-demand Multipath Distance Vector (AOMDV) protocol. The main purpose of using AOMDV protocol is route discovery, multipath routing, network load handling, increases reliability and avoid the risks of congestion. The proposed technique is implemented in NS2.35 simulator and various performance parameters are evaluated.

References


Simulation of Wormhole Attack in Wireless Sensor Networks using AOMDV Protocol

Wireless Communications 18(2), 66-74.


Index Terms

Computer Science

Security

Keywords

WSN, Wormhole attack, Round Trip Time, AOMDV