Abstract

Now these day multi-hop wireless Ad-hoc network suffer from number of security threat namely wormhole attack. Wormhole attacks make an tunnel that attracted all the communication over the network in order either scan message over packet, drop the packet or for unwanted consumption of battery power of Ad-hoc network. In this paper a wormhole detection and prevention scheme has been proposed in order to save battery power. Proposed scheme upgrade neighbor node information scheme for wormhole detection by encapsulating hop count scheme. Basically in neighbor node scheme there is problem for selection of threshold value. Proposed methodology overcomes that problem by using hop count scheme under that decision. Recently research will focus over wormhole detection and prevention but existing technique having very higher false negative rate and battery consummation along with overloaded control packet and routing overhead. In this paper a wormhole detection and prevention technique has been proposed which is based neighbour node and hop count method.
An Energy Efficient Approach for Wormhole Detection and Prevention


Index Terms

Computer Science

Security

Keywords

Adhoc network  Wormhole Attack  Statistics and Graph Based scheme  AODV