Abstract

The wireless arena has been experiencing exponential growth in nowadays. Wireless devices are now playing an ever-increasingly important role in our lives. An ad hoc network might consist of several home-computing devices, including notebooks, handheld PCs, and so on. Each node will be able to communicate directly with other nodes that reside within range of transmission. For communicating with nodes that reside besides this range, the node needs to use intermediate nodes to relay messages hop by hop. Gray hole is a node that can switch from behaving correctly to behaving like a black hole that is, it is actually an attacker and it will act as a normal node. So we can't identify easily the attacker since it behaves as a normal node. Every node maintains a routing table that stores the next hop node information which is a route packet to destination node. In this paper we proposed an innovative approach for the detection of the dangerous grayhole attack. The proposed algorithm is implemented on a very popular on demand routing protocol known as AODV (Ad hoc On demand Distance Vector) routing protocol. The beauty of this proposed algorithm is that it not only identifies the grayhole attacker node but also confirm it as well. The algorithm is divided into two phases: Noting Phase and the Confirmation phase. To simulate the effect of the proposed work the popular NS 2 (Network Simulator 2) is used.
An Innovative Approach to Detect the Gray-Hole Attack in AODV based MANET

References

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Index Terms

Computer Science

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