Abstract

In wireless ad hoc networks, traditional routing considers hop count and distance for making the route selection. The network is prone to various types of attacks by intruders in which packets maybe modified or dropped. A trust based mechanism maybe employed in which the nodes are constantly monitored for malicious behaviour. An abnormality in the behaviour of the intermediate node effects the trust value and such malicious nodes that are detected maybe excluded from the route and a new route discovery maybe initiated. In this paper, such a trust based routing is proposed to detect network layer attacks. A route discovery is initiated under the detection of malicious nodes as against the use of control packets for route rediscovery. Using simulation, it is proved that the proposed scheme achieves better performance in terms of Packet Delivery Fraction, end-to-end delay and therefore improves the performance of the network under adverse environment

References
20. Yongkun Li; Lui, J.C.S., "Epidemic Attacks in Network-Coding-Enabled Wireless Mesh
Trust based Routing in Wireless Ad Hoc Networks under Adverse Environment


Index Terms

Computer Science Wireless

Keywords

Wireless Ad Hoc Network, Trust Calculation, Attacks, Detection