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Abstract

In wormhole attack, an attacker node keeps data packets at one location in the network and forward to another attacker node far away by tunneling, which again broadcast them into the network locally. The proposed technique is an efficient detection and prevention method called Wormhole Attack Prevention and Detection Using Authentication Based Delay per Hop Technique for Wireless Network. Detection of wormhole attack is done using number of hops and delay of each node in different paths available in network. The sender node is capable to identify both types of wormhole attacks. Proposed technique detects the legitimate path and path under the wormhole attack. From quantitative viewpoint, relevant network simulations

were conducted to validate the proposed scheme using a NS2 network simulator.

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Index Terms

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Keywords

Wireless Ad-hoc Network Wormhole Attack Tunnel Wormhole Detection Technique
Wormhole Affected Path Avoidance.