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Abstract

Wireless networks are gaining popularity to its peak today, as the user's wants wireless connectivity irrespective of their geographic position. There is an increasing threat of attacks on the Mobile Ad-hoc Networks (MANET). The attacks studied in this paper are against the routing protocols in Mobile ad hoc network. We have used AODV for simulating this attacks using NS3. Black hole attack is one of the security threat in which the traffic is redirected to such a node that drops all the packets or the node actually does not exist in the network. Black holes refer to

places in the network where incoming traffic is silently discarded or dropped. Jellyfish (JF) attack is a type of selective black hole attack. When JF node gets hold of forwarding packet it starts delaying/dropping data packets for certain amount of time before forwarding normally. Since packet loss is common in mobile wireless networks, the attacker can exploit this fact by hiding its malicious intents using compliant packet losses that appear to be caused by environmental reasons

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Index Terms

Computer Science   Wireless Communication and Mobile Networks

Keywords

AODV protocol   Black hole & Jellyfish attack   Mobile ad hoc networks (MANETs)   Network Simulator-3