



SECURE ROUTING BACKUP PROTOCOL FOR MANET FROM SELECTIVE FORWARDING ATTACK

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Abstract

In the recent years, wireless technology has enjoyed a tremendous rise in popularity and usage, thus opening new fields of applications in the domain of networking. One of the most important of these fields concerns mobile ad hoc networks (MANETs), where the participating nodes do not rely on any existing network infrastructure. Self-policing networks such as wireless ad hoc networks face a number of problems to retain trustworthiness and cooperation of the network. Selective forwarding attack is one of the harmful attacks against wireless networks and can affect the whole network communication. The variety of defense approaches against selective forwarding attack is overwhelming. In order to avoid the selective forwarding attack, we proposed a scheme of secure data transmission which can forward the data safely, and detect the selective forwarding attack. We judge the trust value of each node to select a secure path for message forwarding to detect the malicious nodes which are suspected to launch selective forwarding attack.

Keywords and phrases: MANET, network security, Ad-hoc network, attack, routing protocols.

