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A Cooperation -Enforcement Protocol for a New Hybrid Routing Protocol for MANETS

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Abstract :

In a public network, it is unlikely for a node which has limited resources to collaborate without gain. For avoidance of the fact that nodes refuse to cooperate in MANET, several schemes classified as reputation-based and credit-based, are considered suitable for ad-hoc networks, whereas many of these schemes are based on proactive or reactive routing protocols but none of them is based on a hybrid routing protocol. In this paper, we propose a new cooperation enforcement protocol for a hybrid routing protocol called AntTrust. This new protocol uses the nodes' reputation to forward packets through the most reliable nodes. The main idea of the protocol is to provide an effective mechanism to measure the reputation of other nodes of the network and to punish all nodes which do not collaborate into the network.

Keywords :

AntTrust, Cooperation-enforcement, MANETs, Mobile ad-hoc Networks, protocol, scheme, selfishness,trust establishment.

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