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Misleading Node Detection and Response Mechanism in Mobile Ad-Hoc Network

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Abstract : Mobile Ad-hoc Network (MANET) is an infrastructure-less network of mobile devices, also known as nodes. These nodes heavily rely on each other’s resources such as memory, computing power, and energy. Thus, some nodes may become selective in forwarding packets so as to conserve their resources. These nodes are called misleading nodes. Several reputation-based techniques (e.g. CORE, CONFIDANT, LARS, SORI, OCEAN) and acknowledgment-based techniques (e.g. TWOACK, S-TWOACK, EAACK) have been proposed to detect such nodes. These techniques do not appropriately punish misleading nodes. Hence, this paper addresses the limitations of these techniques using a system called MINDRA.

Keywords : acknowledgment-based techniques, mobile ad-hoc network, selfish nodes, reputation-based techniques
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