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Abstract

MANETs are much more susceptible to various attacks because of openness in network topology and being away of a centralized administration in management. As an outcome of that, more malicious nodes are often comes in and goes out without being detected from the network topology. Hence, MANET needs very specialized security methods to isolate the false entrance. As well as there is no single solution that fitting in different types of the network where the nodes can be behave like any apparatuses. The networks works well if the nodes are trusty and act rightly cooperatively. In order to improve the security of the network, this paper gets started the new interesting approach to evaluate the trustworthiness of the nodes. Fuzzy Trust-based Secured Routing (FTSR) approach provides a flexible and feasible approach to choose trusted route to meet the requirement of the security of the data transmission. In this, fuzzy logic rule prediction mechanism is adopted to notice the future behavior of node by updating the node's trust. We have also analyzed the performance metrics such as packet delivery ratio, end-to-end delay and average throughput which can also increased accordingly through newest approach.

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Index Terms

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