

Minimization of Denial of Services Attacks in Vehicular Adhoc Networking by Applying Different Constraints

Authors : Amjad Khan

Abstract : The security of Vehicular ad hoc networking is of great importance as it involves serious life threats. Thus to provide secure communication amongst Vehicles on road, the conventional security system is not enough. It is necessary to prevent the network resources from wastage and give them protection against malicious nodes so that to ensure the data bandwidth availability to the legitimate nodes of the network. This work is related to provide a non conventional security system by introducing some constraints to minimize the DoS (Denial of services) especially data and bandwidth. The data packets received by a node in the network will pass through a number of tests and if any of the test fails, the node will drop those data packets and will not forward it anymore. Also if a node claims to be the nearest node for forwarding emergency messages then the sender can effectively identify the true or false status of the claim by using these constraints. Consequently the DoS(Denial of Services) attack is minimized by the instant availability of data without wasting the network resources.

Keywords : black hole attack, grey hole attack, intransient traffic tempering, networking

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