

DETECTION OF SELFISH NODE IN DSR BASED MANET USING REPUTATION BASED SCHEME

SANTOSH KUMAR & SUVEG MOUDGIL

Department of Computer Science & Engineering, HEC, Jagadhri, Kurukshetra University, Kurukshetra, India

ABSTRACT

MANET is an autonomous system of mobile nodes connected by wireless links. Mobile ad hoc networks are prone to a number of security fears. To handle the selfish nodes is major issue in ad hoc network. The Dynamic Source Routing protocol is a simple and strong routing protocol designed especially for the use in wireless ad-hoc networks of mobile nodes. The use of the source routing allows packet routing to be slightly loop-free, avoid the need for up to date routing information in the intermediate nodes through which packets are forwarded and allows nodes forwarding to cache the routing information in them for their own future use. Reputation of a node can be calculated using a simple formula and a node is supposed to maintain a good reputation value to participate in route discovery process otherwise discard in route discovery. In this paper the DSR protocol based on reputation scheme is implemented to detect the selfish node and the evaluation is done through performance metrics (Packet delivery ratio, Average end to end delay) in Network Simulator.

KEYWORDS: DSR, Mobile Ad Hoc Network, Reputation DSR, Reputation/Trust, Routing, Selfish Node