

DESIGN AND SURVEY OF ROUTING PROTOCOLS IN MANET

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Abstract

Mobile ad hoc network (MANET) is a collection of wireless mobile nodes which communicate and exchange data with each other without any central administration or wired infrastructure. Here the nodes communicate with each other with frequently changing topology. Thus routing in MANET is a difficult task as the nodes are moving. With the advancement of technology the MANET requires that it should consider certain Quality of Service (QoS) constraints. Thus in the proposed protocol we use the uncovered neighbor set generation mechanism to restrict the broadcasting limit, which helps in reducing the network overhead. Due to limited processing power, energy, routing table size and different mobility of the nodes, it is hard to maintain a stable path between the communicating nodes. Thus the proposed protocol makes use of average state calculation technique to increase the route stability and efficiency. In this way we can achieve improved performance of the routing protocol in MANET.

Keywords: MANET, Routing, Rebroadcasting, Uncovered Neighbor Set.