

CERD: Cost Effective Route Discovery in Mobile Ad Hoc Networks

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Abstract : A mobile ad hoc network is an infrastructure less network, where nodes are free to move independently in any direction. The nodes have limited battery power; hence, we require energy efficient route discovery technique to enhance their lifetime and network performance. In this paper, we propose an energy-efficient route discovery technique CERD that greatly reduces the number of route requests flooded into the network and also gives priority to the route request packets sent from the routers that has communicated with the destination very recently, in single or multi-hop paths. This does not only enhance the lifetime of nodes but also decreases the delay in tracking the destination.

Keywords : ad hoc network, energy efficiency, flooding, node lifetime, route discovery

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