Abstract

A Mobile Ad-Hoc Network (MANET) represents a system of wireless mobile nodes that can freely and dynamically self organize into arbitrary and temporary network topologies without presence of any fixed infrastructure. Multicast routing in MANETs is an efficient method to lead data packets from one source group to several nodes as destination group. Multicasting can improve the efficiency of the wireless link when sending multiple copies of messages by exploiting the inherent broadcast property of wireless transmission. Although multicast routing algorithms in MANETs could be efficient in many situations, but the devices in MANETs are typically equipped with limited energy supplies which makes energy efficiency as one of the primary objectives in the design of multicast routing algorithms in wireless networks. In this paper fuzzy logic method is used to create small, strong forwarding group and reducing overhead method is used to restrict the domain of control packet flooding so as to reduce the overhead. The combination of above two methods is applied to Adaptive delay multicast routing protocol (ADRP). A ns-2 simulation study performed and our results revealed that the resultant increases packet delivery rate reduces average end-to-end delay and consumed power.
References

- B Ravi Prasad, Dr. A. Damodaram, Dr. G. Venkateswara rao "Implementation of Adaptive Delay Multicast Routing Protocol" in IJARCE March 2013

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