



Research Article



Mobile Relay Configuration using Effective Data Transmission in MANET

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ABSTRACT

MANET is the wireless network that is self-

configured and the nodes run without fixed infrastructure. As networks are growing in technology and bandwidth, they are able to render multimedia applications as well. Topology control is one of the approaches in MANET to improve performance. Network capacity can be improved with different parameters when optimized. In the literature it is found that delay and interference are two important aspects that cause performance issues. Optimizing them is very important. In addition to this, transmission efficiency needs to be taken care of. In this paper we proposed a mechanism based on mobile relay which ensures that relay nodes move appropriately before data is transmitted. It can cause reduction in delay and interference besides improving throughput. Before the relay node is moved to different location, it considers the benefits of moving as per the algorithm and makes well informed decisions. We implemented the proposed approach using NS2 simulations. The results showed that the proposed approach is useful in improving the performance of MANET communications.

Keywords: Mobile Ad Hoc Networks, topology control, relay configuration, delay.

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