Abstract

Mobile ad hoc network is an emerging trend and it has to face many challenges and issues. Routing in these networks is highly complex due to moving nodes and hence many protocols have been developed. Routing in ad hoc networks is a very challenging issue due to nodes mobility, dynamic topology, frequent link breakage, limitation of nodes (memory, battery, bandwidth, and processing power), and lack of central point like base stations or servers. So by analyzing different ad hoc routing protocols based on the metric throughput, packet delivery ratio, end to end delay which may yield a solution to the challenges in the ad hoc routing in different situations. The performance may vary depending upon the topology, flow patterns, mobility speed of the system.
Top of mobile ad hoc network is varying from time to time. The basic idea behind this paper is to modify AODV that each node uses routing information provided by the new neighbor nodes to find out and exchanges to better paths and create accumulated routes for later use. Simulated modeling results in Network Simulator (NS2) show that the approach can create more optimal routes and significantly improves the performance using by decreasing average delay time in some cases. This paper highlights the swapping of path information on AODV which is highly dynamic (HDAODV) when there is no link breakage. The performance results put HDAODV is bit better than AODV.

Reference


Index Terms

Computer Science Wireless

Key words

Node mobility dynamic topology frequent link breakage
Highly Dynamic Ad hoc On Demand Distance Vector (HDAODV) Routing Protocol for MANET

delivery ratio

end to end delay