Abstract

Routing in Mobile Ad hoc Networks (MANETs) is a complex one due to the absence of any central coordinator and infrastructure. Congestion is one of the prominent reasons for link-failure in network due to the heavy traffic which leads to failure of nodes, network partition and topology change. Due to power drainage among nodes, network topology changes and the nodes should be well adaptive to respond quickly to the changes. Various existing routing protocols forward the data packets towards the destination through the path having less number of hop counts. However, these protocols do not minimize the traffic load in the network and thus causes congestion which reduces the network operation. A routing protocol called Efficient Path Selection (EPS) is proposed which enhances the quality of services' issues such as Packet Delivery Ratio, End to End delay, Energy Consumption and also provide secure transmission of data packets. This paper provides secure and efficient path routing. The simulation signifies that proposed protocol provides reliable secure transmission than the existing Implicit Source Routing (ISR) protocol.
References

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Index Terms

Computer Science Wireless

Keywords

MANETs link-failure hop count traffic load quality of service efficient path security