Abstract

Appropriate routing protocol in data transfer is a challenging problem of network in terms of lower end-to-end delay in delivery of data packets with improving packet delivery ratio and lower overhead as well. In this paper we explain an effective and scalable AODV (called as AODV-ES) for Wireless Ad hoc Sensor Networks (WASN) by using third party reply model, n-hop local ring and time-to-live based local recovery. Our goal is to reduce time delay for delivery of the data packets, routing overhead and improve the data packet delivery ratio. The resulting algorithm “AODV-ES” is then simulated by NS-2 under Linux operating system. The performance of routing protocol is evaluated under various mobility rates and found that the proposed routing protocol is better than AODV.

Index Terms

Computer Science  Wireless Networks

Key words

Mobile Ad hoc Network

AODV-ES

Routing Protocol

Effective

scalable