Abstract

A mobile ad hoc network (MANET) is a collection of wireless mobile nodes dynamically shaping a provisional network devoid of the use of any existing network infrastructure or centralized management. In MANETs, security is the major challenge due to the dynamic topology which is because of the mobility of the nodes. In this paper, we propose to design and
Secured Distance Vector Routing (SDVR) Protocol for Mobile Ad-hoc Networks

develop a secure methodology incorporated with the routing mechanism without having any compromise on the performance metrics viz., throughput, and packet delivery fraction. Not only just improving the throughput and packet delivery fraction it will also reduce the end-to-end delay and MAC overhead along with reduced packet loss. We name it as Secured Distance Vector Routing (SDVR) protocol. It adopts several features of the already existing protocol named Ad-hoc On-demand Distance Vector Routing (AODV). The simulation results prove that our proposed protocol SDVR outperforms AODV in all performance aspects.

Reference


Index Terms

Computer Science

Wireless

Key words

Secured Distance Vector Routing (SDVR)

MANET

AODV