Abstract

In Mobile Ad hoc Networks (MANETs) providing performance enhancement in term of bandwidth, security for soft real time processing services is very difficult. All routing protocols are intended for operation in a trusted environment in which all nodes are honest, and they do not consider the disruptions that can be caused by a malicious attacker sending arbitrary (e.g. forged) routing packets. In this paper, we have proposed a performance enhancement with multipath routing in term of bandwidth and security on MANETs that reactively collects link-state information from source to destination in order to dynamically construct a flow network. The QoS enabled multipath routes between source and destination has been detected by destination node under the CDMA-over-TDMA channel model of MAC layer, which collectively satisfy required bandwidth and security services during route discovery process. For secure route discovery, we use hashing chain and onion encryption an asymmetric key cryptography for authenticating source to destination route, so that no modification is done during en-route process.
References


Index Terms

Computer Science
Networks
Keywords

Multipath routing, QoS, bandwidth, security etc.