Abstract

A hybrid Mobile AdHoc Network (MANET) is provided by gateways (GWs), which connect the MANET to the Internet. Hybrid MANETs are vulnerable to more security threats while routing through the gateways. To guarantee secure hence efficient data routing and transmission, In this paper, we propose to design a data aware secure gateway selection technique for hybrid MANET. In our technique, gateway is classified into two categories as public gateway and protected gateway. Protected gateway can route both public and protected data. Conversely, public gateway can only route public data. Among multiple gateways, a gateway is elected using multi criteria gateway selection strategy. Protected gateway and mobile nodes are authenticated using Extensible Authentication Protocol (EAP). By simulation results, we prove the performance of our technique. This gateway authentication technique improves the routing performance of MANETs.
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Index Terms

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Keywords

Hybrid MANETs  EAP  Protected gateway