Delay Efficient Authenticated Anonymous Secure Routing for MANETs

Abstract

The mobile ad hoc network (MANET) is nothing but the wireless connection of mobile nodes which provides the communication and mobility among wireless nodes without the need of any physical infrastructure or centralized devices such as access point or base station. The communications in MANET is done by routing protocols. At present MANET is used in many real time applications and hence such networks are vulnerable to different kinds of security threats. MANET networks suffered more from security attacks due to use of free wireless communication frequency spectrum and dynamic topology. Therefore it becomes very tough to provide secure to MANET under different adversarial environments like battlefields. For MANET, anonymous communications are vital under the adversarial environments, in which the identification of nodes as well as routes is replaced by pseudonyms or random numbers for the purpose of protection. There are many protocols presented for anonymous communication security for MANET, however suffered from limitations like worst delay, vulnerable to DoS attacks etc. In this paper presents Delay Efficient Authenticated Anonymous Secure Routing [DEAASR] which is extension of existing AASR approach presented recently. The main aim of

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DEAASR protocol is to provide secure data communication with the goal of improving performance packet delay and routing efficiency for different attacks in MANET.

References


Index Terms

Computer Science
Networks
Keywords

AASR, Anonymous Routing, delay efficient routing