Abstract

Since the last few years VANET have received increased attention as the potential technology to enhance active and preventive safety on the road, as well as travel comfort. Security and privacy are indispensable in vehicular communications for successful acceptance and deployment of such a technology. Generally, attacks cause anomalies to the network functionality. A secure VANET system, while exchanging information should protect the system against unauthorized message injection, message alteration, eavesdropping. In this paper, various security and privacy issues and challenges are discussed. The various authentication schemes in wireless LAN, VANETS are discussed. Out of various authentication schemes that are used to reduce the overhead in authentication, when roaming - proxy re-encryption scheme and new proxy re-encryption scheme is reviewed in detail. A comparison between the two schemes is done, which shows that the privacy can be maintained better by using new proxy re-encryption.

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**Index Terms**

Computer Science  Security
Key words

Non-frame ability
Identity privacy

Location Privacy
delegators