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.

Reference


[3] Review Article- “Routing in Vehicular Networks: Feasibility, Modeling, and Security” Ioannis Broustis and Michalis Faloutsos Department of Computer Science and Engineering, University of California - Riverside, CA 92521, USA Correspondence should be addressed to Broustis Ioannis, broustis@cs.ucr.edu Received 11 July 2007; Accepted 19 March 2008


[16] Xiaonan Liu, Zhiyi Fang, Lijun Shi. “Securing Vehicular Ad Hoc Networks”, School of Computer Science and Technology, Jilin University Changchun, 130012, P.R China Lxn6O2@sina. com, zyfang@public. ccjl. Cn

[17] Jun Liu, Xiaoyan Hong, Quanwei Zheng, Lei Tang “Privacy-Preserving Quick Authentication in Fast Roaming Networks” Department of Computer Science, University of Alabama, Tuscaloosa, AL 35487 {jliu,hxy,qzheng,ltang}@cs.ua.edu

Index Terms

Computer Science

Security
**Key words**

- Non-frame ability
- Identity privacy
- Location Privacy
- Delegators