Abstract

Vehicular network security is an important field and it is agreed that digital signature certificates are becoming the main authentication technique in this environment. The high number of vehicles and their continuous location change bring some difficulties in the exchange of these certificates and in their revocation. This paper covers these two cases and proposes an enhancement to the certificate revocation list (CRL) that is efficient when entire set of certificates belonging to same party are revoked. Then it proposes a solution to the exchange of certificates between vehicles by using the road side units as caching servers. It is shown that cooperation between caching servers enhances the distribution operation.

References

Enhanced Management of Certificate Caching and Revocation Lists in VANET

- Raya M., Papadimitratos P., and Hubaux J. P. "Securing Vehicular Communications", In IEEE Wireless Communications Magazine, Special Issue on Inter-Vehicular Communications, October 2006


Index Terms

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