Abstract

A novel kind of ad hoc network is defeating the roads: Vehicular Ad Hoc Networks. In these networks, vehicles communicate with each other and perhaps with a roadside infrastructure to provide a long list of requests varying from transit safety to driver support and Internet access. Security is a vital concern for many Vehicular Ad-hoc Network applications. One specific serious attack, known as Sybil attack, against ad hoc networks involves an attacker illegally claiming multiple identities. In these networks, information of the real-time position of nodes is a supposition made by most protocols, algorithms, and requests. This is a very reasonable assumption, since GPS receivers can be fitted easily in vehicles, a number of which already comes with this technology. In this method, each Road Side Unit calculates and stores different parameter values (Signal Strength, distance) after receiving the inspiration packets from nearby vehicles.

References


17. Chen, Xianbo, Hazem H. Refai, and Xiaomin Ma. "On the enhancements to IEEE 802.11


Index Terms

Computer Science

Networks

Keywords

Security, Roadside Units, GPS and Application of Vehicular Ad-hoc Network.