

Security in Emergency Situations

Project Description

Jun Yi, Yiming Peng

The goal of our project is to provide a secure communication system for emergency situations. This system enhances the emergency response system (like DIORAMA) by offering authorization and encryption for information disclosure and network communication.

The basic target of the project is to design a user authorization system in both Android end and server end. This system allows users with different authorities to access different levels of information.

Our second step is to encrypt the communication between the client and server, preventing unauthorized devices or camouflages from getting information from the server.

References

- [1] Jung Ha Paik, Seog Chung SEO, Yungyu Kim, HwanJin Lee, Hyun-Chul Jung and Dong Hoon Lee, "An Efficient Implementation of Block Cipher in Android Platform", 2011 Fifth FTRA International Conference on Multimedia and Ubiquitous Engineering
- [2] Zhao Hu, Yuesheng Zhu, and Limin Ma, "An Improved Kerberos Protocol based on Diffie-Hellman-DSA Key Exchange", Shenzhen Graduate School, Peking University
- [3] Radek Pospíšil, "Authentication in Computer Networks and Proposal of One-Time Increase of User Permissions"
- [4] Maurizio Casoni and Alessandro Paganelli, "Security Issues in Emergency Networks", Vignolese 905, 41125 Modena (MO), Italy
- [5] Yunhua XIANG, Qian ZHANG, Liwei ZHANG, "To Strengthen the Role of Social Security in Emergency Management", Wuhan University