Abstract

In the recent years the NFC with the combination of smart devices has widened the utilization range of NFC. It is said it will replace the credit card in electronic payment so security is one of the area that is to be checked. Currently the NFC security requires user's public key with the fixed value which contain the message. The attacker can create a new profile of the user by using their public key and thus the privacy of the user is compromised. In this work, network environment can be generated using 50 nodes. User can select source and destination node and then simulation can be done on the basis of proposed algorithm. The conditional privacy protection based on multiple pseudonyms is used to solve the issues generated in NFC environment. This work is to optimize the above environment by using optimization algorithm. Genetic algorithm which is artificial intelligence based algorithm is used in this to reduce the storage requirement, average delay, packet drop ratio and improve the network's throughput.

References
Optimized Conditional Privacy Preservation Protocol for NFC Applications using Genetic Algorithm

- Roy Want, "Near Field Communication", Published by the IEEE, Vol. 16, No. 9, pp. 28-29, September 2011.

Index Terms

Computer Science
Artificial Intelligence
Keywords
NFC  Security  TSM  Pseudonyms  Throughput  Storage Requirement  Packet Drop Ratio (PDR)

Average Delay