Abstract

The introduction of electronic commerce has created new financial needs that in many cases cannot be effectively fulfilled by the traditional payment systems. The success of electronic commerce business depends on the credibility of the available electronic payment systems. Electronic cash payment is one electronic payment system developed to settle payments electronically, but suffers the problem of double-spending fraud. This paper identifies the possible causes of double-spending fraud and presents techniques to mitigate this type of fraud. These techniques involve the modification of existing electronic cash payment system, and a demonstration of the modified system to determine its double-spending fraud resistant capability.

References

An Immediate Real Time Detection and Prevention of Double-Spending in Electronic Cash Payment System

Proceeding of the 8th Annual International Cryptology conference on Advances in Cryptology (CRYPTO‘88), Santa Barbara, California.


Index Terms

Computer Science
Artificial Intelligence
Keywords
eCash  algorithm  registration certificate  double-spending  fraud resistant
capability
merchant
real time
entity
public key infrastructure
subscriber registration authority.