A New Approach to Enhance Internet Banking Security

Abstract

E-Banking in www is growing exponentially, but here consumer authentication, credential confidentiality, transaction information integrity are growing concerns. In this research work emphasize the protection of online banking. At first, E-banking is analyzed for all kinds of vulnerabilities and a practical investigation of all type of attacks is carried out. In this paper, a security-aware architecture is introduced to protect from several attacks. The proposed system has a secure protocol and certificate verification mechanism. The proposed system checks the authenticity of the sender first; then if appropriate, processes the incoming messages and stores them for further processing. This covers everything from phishing site detection to two-factor authentication. Having declared all current schemes for protecting online banking lacking in some way, the key aspects of the problem are identified. This is followed by a proposal for a more robust defense system which uses a small security device to create a trusted path to the customer, rather than depend upon trusting the customer’s computer. This is followed by a description of a demonstration implementation of the system.
References


Index Terms

Computer Science Security

Keywords

E-Banking Security Protocol, E-Banking Authentication