A Signcryption Approach Based On Recent Digital Signature Schemes

Signcryption is a public key cryptography, which depends on performed digital signature and public key encryption in a single logical step. Signcryption has been implemented using various signature schemes such as ElGamal's shortened digital signature schemes, Proxy signature scheme, RSA digital signature, elliptic curve digital signature and Schnorr's signature scheme. Researchers are still working to find out the most effective method for signcryption. The proposed Signcryption achieves the main security requirements to overcome the weakness in the signcryption based on ElGamal shortened digital signature depending on fast encryption in signcryption side and solving the problem in decryption process by recovering original plain-text through four plain-texts in the receiver side.