Secure Communication System with Digital Signature and Encipherment

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Abstract

With the rapid advances in security threads, more reliable security techniques have become the business necessity. The security services must assure that the communication is not refered with in such a way that the party can masquerade for the purpose of unauthorized transmission or reception. To maintain the security services (confidentiality, authenticity and integrity), the security mechanisms such as digital signature and encipherment should be used. This system describes digital signature and encipherment to protect the information transmission for secure communication system. The purpose of this system is to transport information reliably across an insecure channel and to ensure complete confidence between participants. To implement this system, SHA-1 (Secure Hash Algorithm), RSA(Asymmetric Algorithm) and DES(Symmetric Algorithm) are used.