Abstract
Asymmetric Key based Secure Data Transfer Technique

Data security is one of the important issues in network communication. Secure data transfer become more essential and important, as security is a major concern in the field of message transformation over internet. Data, that is likely to be kept hidden from all people except the authorized users, could not be sent as plain text. Each data has its own features; therefore different techniques are used to protect data from unauthorized access. In recent years, Cryptography and Steganography are two important areas of research that involve a number of applications. These two areas of research are important especially when reliable and secure information exchange is required. Cryptography is the technology that involves converting a message text into an unreadable cipher. Steganography is an art of embedding information in a cover image without causing statistically significant variations to the cover image, so a carrier is needed to transfer information. In this paper, we have tried to introduce a new approach to encrypt secret information which is based on the concept of triangularization. Since the encryption and decryption is done on a binary file by means of successful implementation of XOR operation and this standard should be effective on any type of data such as text or multimedia files.

References

- Sedat Akleylek, "On the avalanche effect of MISTY1, KASUMI and KASUMI-R", Master's thesis, Middle East Technical University, Feb 2008
Keywords

Security  Cryptography  Steganography  Encryption  Decryption  Triangularization