Abstract

With the fast progression of digital data exchange in electronic way, information security is becoming much more important in data storage and transmission. Cryptography has come up as a solution which plays a vital role in information security system against malicious attacks. The cryptography is most important aspect of communications security and becoming an important building block for computer security. This security mechanism uses some algorithms to scramble data into unreadable text which can be only being decoded or decrypted by party those possesses the associated key. These algorithms consume a significant amount of computing resources such as CPU time, memory and computation time. This paper analyses the performance of DES & 3DES which are widely used symmetric encryption algorithms i.e. Data Encryption Standard (DES) and triple Data Encryption Standard (3DES) in terms of time computation of encryption and decryption as well as avalanche effect of the both algorithms.
13. Abdel-Karim Al Tamimi, “Performance Analysis of Data Encryption Algorithms”
23. Network security (second edition) by Kaufman-PerlmanSpeciner

Index Terms
Performance Analysis of DES and Triple DES

Keywords

Cryptography, DES, Triple DES, Avalanche effect