

Abstract

Information and communication are important thing and not affected by distance and time now. SMS is often used for communication and information delivery because of its simplicity and fast delivery. SMS that is sent in form of plain text is often used for secret message delivery.

This final assignment implements encryption and decryption process on SMS message, so secret message that is sent by SMS will be kept as secret message. Encryption and decryption process on SMS is implemented using RSA algorithm that gives ease in key distribution.

This final assignment measured and analyzed about message encryption and decryption time and cipher text size that is created form encryption process. From the result of analysis can be concluded that encryption and decryption time is increasing while message size is increasing. The increment of encryption and decryption time is irregular because it is also influenced by key bit length that determines the size and the number of message block that is processed in message encryption and decryption. The size of cipher text is also increasing irregularly, because cipher text size is influenced by combination of message size and key bit length that determines the size and the number of message block.

Keywords: SMS, encryption, decryption, RSA algorithm, encryption and decryption time, cipher text.