Abstract

Instant Messaging supports the existence of the ease of communication. One of the Instant Messaging service that is widely used by the public is Yahoo!. With Yahoo! Protocol, data packets are transmitted in plaintext form. It is vulnerable to attacks that data when the data packets are being sent from or to users who are communicating. Therefore, in this project, an application that can encrypt the data packet had been built to address these security issues.

Application built on this final project is using the Java programming language in which the interface of the application integrated with the API jYMSG and packet encryption. The Encryption with Blowfish algorithm is used for adjusting the characteristics of the Blowfish that is fast, compact, simple, and has a variable security.

Encryption process performed before the data packet is transmitted from client to server. Encryption transform plaintext into cipher text random characters. This will be more difficult when the data packet being attacked by Attacker. The decryption process performed when the application receives a message form server and with the same key for encryption and decryption.IMMonitor Yahoo Messenger Spy used to view the contents if data packets on the netmork.

Application can improve security without affecting the performance of system that seen from the runtime and free memory.

Key word : Instant Messaging, Yahoo!, jYMSG, Blowfish, Encryption, Decryption, IMMonitor Yahoo Messenger Spy