## Bluetooth wireless network authentication using radio frequency communication protocol

Problem statement: Bluetooth has emerged as very popular ad hoc network standard today. Bluetooth network applications include wireless synchronization, e-mail/internet/intranet access using local personal computer connections, hidden computing through automated applications and networking. Due to this ability, it is not impossible for the network to receive any attack. Approach: In this study, we developed an algorithm to build new software that secures connections between two Bluetooth platforms, which included authentication, authorization and confidentiality. There is no authentication when using the protocol in connecting the Bluetooth platform. When there is no security, so that all users can directly connect to the server without any permission because in most of the application nowadays that refers to RFCOMM protocol is not. Results: The test environment for the non-secure connections is also being setting up before build the software. The purpose of this study was to build a secured Bluetooth application in connecting Bluetooth Platform using Radio Frequency Communication (RFCOMM) protocol. Conclusion: Furthermore focusing on setting up the test environment for a non-secure connection application.