Abstract

Drug storage is important to maintain availability and avoid damage. The use of conventional locks on drug storage can result in duplication of keys, leading to theft by both internal and external parties. IoT devices are a solution to deal with theft in the use of conventional keys, these devices can carry out security mechanisms such as employee passwords stored in device storage, one of which is electrical erasable programmable read-only memory (EEPROM) storage. EEPROM can store the information directly with its writeable and readable nature so that information can be physically duplicated or data retrieval indirectly. Two-factor authentication on IoT devices is needed to maintain security on device storage by using rfid as an identity and fingerprint as a key to be able to access devices with additional authentication security using SHA-256 on rfid as data security and the use of *Rivest Shamir Adleman* (RSA) to secure delivery data between the client and the server.

Keyword: dual authentication, rfid, fingerprint, sha-256, RSA.