

ABSTRACT

In its development, the smartphone can conduct transactions directly. Credit card functions, Automated Teller Machine (ATM), and others can be replaced by using a smartphone that has a Near Field Communication (NFC) module. There is a weakness in transactions when using a smartphone, it can cause security issues.

This study conducted penetration on users who make transactions through NFC reader. In the transaction is carried out an attack on the NFC users and tested the success or failure of the attack. The attacks consist of Man-In-The-Middle-Attack, brute force, replay attack, and MAC cloning

Transactions using a smartphone must be careful of the data flow that occurs. Information can be easily obtained about the user and used for the benefit of the attacker.

Keywords: brute force, near field communication (NFC), man-in-the-middle-attack, penetration