Deteksi Serangan Cloning pada RFID Mifare Menggunakan Metode Synchronized Secret

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Abstract

Radio Frequency Identification (RFID) is a technology used to identify automatically in various sectors. Besides the many advantages that are presented by RFID, a very important security system is being neglected. Vulnerable security occurs in a cloning attack, the problem of RFID cloning is the focus of this study because follow-up the crime of cloning can threaten identity theft that harms someone in an agency. The solution given to identify cloning on RFID is to design the system uses the Synchronized Secrets method which is integrated using a database and my access application is based on android to ensure that those who use RFID tags are the original owner. This android application also records every activity carried out by the tag and tag notify the user and can block the RFID card if the user gets a notification of suspicious RFID activity. The secret key used in this method is capable of detects RFID cloning because every time the RFID succeeds in tapping the secret key is always updated to a new secret key so that the old secret key becomes inactive and the application my access which supports as a notification to the user regarding tapping activity.

Keywords: RFID, Mifare Classic, Cloning, Synchronized Secret, Aksesku Application

1. Pendahuluan