
Abstract

This study makes the design of prevention models using one-time-passwords for the internet of things based on MQTT. One of the most widely used protocols in Iot is MQTT with advantages such as light transmission needs for small bandwidth, open-source and easy to implement. However, the MQTT protocol is still vulnerable to authentication attacks which are the basis of security on a network. The method of attack is brute force to get a user account. The method used in this study is One-time-password because the excess is sending a token in the form of a unique code to the user to access the broker. The brute force attack can successfully get the password from the user. However, attackers cannot access the MQTT system due to OTP.

Keywords: IoT, MQTT, authentication, brute force, one-time-password
