ABSTRACT

Internet of Thing (IOT) is a concept where objects can be interconnected and communicate through the Internet. One thing that is affected by the concept of IOT is education. Universities in Indonesia trying to make the campus into a smart campus and presence system is one of the services that must be considered to embody smart campus. Telkom University is currently using RFID (Radio Frequency Identification) to do presence. The technology work that the user only needs to get closer the RFID smartcard to RFID reader to identify a person. But RFID has the disadvantage that the accuracy in reading data for notifications RFID only of lights and beep sound that resulted in a user does not know for sure the data has been recorded or not, the RFID reader that only one in every room, and reading data on the smartcard which only can be done with a distance of less than 3 cm from the RFID reader makes the user needs perform migration to do presence. In this final project has made smart presence based on OpenWRT using Wi-Fi that has response time with 15.5 seconds up to 39.5 seconds for each employee confirm their attendance and 16 seconds up to 61 seconds to confirm their attendance together.

Keyword: smart presence, OpenWRT, access point, Wi-Fi