

ABSTRACT

Along with the rapid development of data center infrastructure implementation, the need for a concept of physical security on Data Center devices needs to be considered. Data center security is not only on operating systems. But on the physical data center device itself. The physical condition of the data center needs to be considered for security because the general public can operate it if there is no physical security in the data center. With physical security on the data center device, it will prevent people who do not have access rights to not be able to operate the Data center. For that, one of the solutions for physical security on Data Center devices is using the RFID Door Lock sensor system.

Data center security is not only on the operating system. But on the physical data center itself. Data center physical condition needs to be considered for its security because the public can operate it if there is no physical security in the data center. With the physical security of this data center device will prevent people who do not have access rights to be able to operate the data center. For that one solution for physical security on Data Center devices using a digital key sensor system.

In this final project, a Door Lock device is designed using a NodeMCU microcontroller which will be connected to the Blynk application using ESP8266. With the RFID Door Lock on the Data Center device, the technicians will no longer have to bother to unlock the server rack manually. The key can be opened via a Mifare Card which will be tapped into the RFID device. Later, the smartphone will be able to receive notifications when someone opens the lock. in the Blynk application. The author hopes that the implementation of the door lock prototype with the PPDIOO method can be developed again in the next research to achieve better security to keep the server rack device in the Data Center secured.

Keywords: Data center , PPDIOO, Blynk, RFID, Mifare, ESP8266, NodeMCU