ABSTRACT

To maintain the security of a building that has a sensitive data room needed a security system that is effective and efficient. The security system used to protect the security of data - critical data contained in the building from the thief who wants to take it. Along with the development of technology, security systems using embedded system is enough to control and monitor the room, so that it can detect anyone who enters on a room.

To support this security system needed a server that serves as a storage form of recording and storing IP Camera Record visitor data. The selected server is Cloud Server PaaS (Platform as a Service). Cloud Server Platform as a Service is a service that provides computing platforms. Cloud Server will run on the Raspberry Pi making it easier to control and carry out commands that get less delay. API that used is a REST API that is built using the framework flask. The use of REST APIs to perform data communications used for communication using the commands method in HTML. With the use of Cloud Servers can be easier to access data from anywhere.

Cloud Servers that created can store and send data that received from embedded systems and IP cameras. Cloud Servers can be accessed by the user via the mobile application. When performing access to the server, the user will get a response speed differently. This difference is caused by the use of different internet service in this case wired and wireless. From the research results by using the server response speed wired internet services faster; the average 624.8667 ms response time, instead of wireless internet service that have the average response time 2224.333 ms.

Keywords: *Cloud Server*s, Building Security System, Embedded System