

ABSTRACT

Temperature and humidity are the ones that are based on the hardware performance as well as on the server space. The server space is a space containing switches, hubs, servers and routers. The server space serves as a data storage space and a network device. One of the impacts if the temperature and humidity of the server room is not maintained well that can lead to slowing the performance of the devices contained therein. If IT is assumed on the space of Telkom's IT server is good temperature in the range of 20-25 °C and good humidity at the range of 40%-55% by following the standardization of Telecommunications Infrastructure Standard for Data Centers (TIA-942) Accredited by the American National Standards Institute (ANSI). Monitoring device temperature and humidity server space based on Internet of Things with an Android application notification consists of one fruit DHT 11 which is responsible for detecting the temperature and humidity of the server room then Android application will display the data Temperature and humidity are legible on the DHT 11 sensor. When the temperature reads exceeds 25 °C then while the same relay is on the condition and will turn on the fan to cool the room temperature server. The Android application will send notifications continuously until the temperature reads on DHT sensor 11 is less than 25 °C. Notifications on Android apps are sound and notifications on the smartphone screen. The DHT 11 Sensor that is used to read the temperature and humidity has an average total error of 19.44% and the average total error on humidity of 0.486%, by conducting 5 times the test in each temperature and humidity test.

Keywords: *Temperature and Humidity, Server Room, Internet of Things, DHT 11, NodeMcu Esp8266*