Abstract

In this research using plartofrm OpenMTC by applying MQTT protocol as the communication protocol. MQTT performance with 3 QoS services as compared to the HTTP protocol that has been provided by OpenMTC. Performance comparison test conducted by 3 parameters, dekay, packet loss and protocol overhead. Test conducted by sending the sensor data as 10, 100 and 1000.

The results showed that the HTTP protocol has lower delay about 0.0007 seconds than MQTT, packet loss 0% for both protocols and MQTT protocol has a lower protocol overhead 40% compared to HTTP.

In the development of this research are expected to implement the MQTT protocol on GSCL and NSCL, and may change the communication protocol on the overall OpenMTC be MQTT.

Keywords: OpenMTC, MQTT, HTTP, *Delay, Packet Loss, Protocol Overhead.*