

Abstract

In this research focus on smart building communication by applying protocol CoAP in OpenMTC M2M middleware platform that previously had standard protocol HTTP. CoAP protocol has located in communication between sensor or device application and GSCL OpenMTC.

Performance testing use sensor data at 10, 100, and 1000 by sending sensor data from device application towards GSCL OpenMTC and were determined use parameter, that is delay, throughput, and overhead protocol. this value represent the amount of sensor data on a building. The results show that CoAP protocol has lower delay, more stable throughput when the sensor data reaches 1000, and overhead of CoAP protocol has approximately 50% lower compared with HTTP protocol.

Keywords— Smart Building, M2M, OpenMTC, CoAP, HTTP, performance.