

## Abstract

Communication between devices can be done in various ways, one of them is the Publish / Subscribe model that uses the MQTT protocol. From the shortcomings that exist in JSON, such as long processing time, Google recently introduced a new data format called Flatbuffers. Flatbuffers has a better data format serialization process than other data formats. This paper will discuss the implementation and testing of the Flatbuffers data format performance compared to other data formats through the MQTT Publish / Subscribe communication model. Testing is done by measuring the value of payload, latency, and throughput obtained from each data format. The test results show that the Flatbuffers data format is very well used as a data extraction format based on data processing latency of 0.5002 ms and throughput 518.4649 bytes/ms with payload 0.996108949 byte/character.