

**Abstract**

*IoT is supported by many protocols, one of which is Message Queuing Telemetry Transport (MQTT). MQTT is a communication protocol that requires small resources and bandwidth. The MQTT protocol uses a broker whose job it is to connect publishers and subscribers. When the broker experiences a failure, the publisher and subscriber cannot communicate and have to wait for the broker to be repaired. This problem can be minimized by implementing load balancing methods. Load balancing is a technique of distributing traffic loads on two or more servers so that traffic is evenly distributed and avoid overloads that may occur on the server. Least connection is one of the load balancing algorithms in which this algorithm works based on the connection served by the server. The least connection algorithm works a more complex calculation by comparing the number of connections on each server. The results of the test using the least connection algorithm get a high throughput parameter value and a lower error rate.*

**Keywords :** *MQTT, Load Balancing, Least connection.*