

MIMIC[®] MQTT Simulator

MIMIC MQTT Simulator creates a virtual lab with thousands of IoT sensors and devices. MIMIC allows suppliers of MQTT sensors, devices and applications to design, develop and test their Brokers, Load balancers and clients using secured connections, in a virtual and scalable network environment. Using MIMIC, they can assure their customers that their applications will be able to handle the scales of connections, topics and varieties of messages to work properly when deployed across heterogeneous environments. Best of all, you can reduce your lab budget significantly.

MQTT Simulation – a complete IoT Smart City

- **Simulate thousands of Publishers & Subscribers:**
 - ✓ Each with their own IP address, Port, Client ID and Authentication.
 - ✓ Each Publisher can publish to multiple, unique topics.
 - ✓ Each Subscriber can subscribe to multiple, unique topics.
 - ✓ Each Publisher can be a Subscriber also.
- **Connect to Brokers, Load balancers and clients using secured connections using TLS.**
- **Include Authenticated (with User Name/Password) messages for every connections.**
- **Send messages with various QoS levels.**
- **Send messages with various message length, different frequencies or malicious information to test the security.**

Applications

- **Development & Testing** - MQTT developers can implement products quickly and test reliably, specifically, the testing of scalability against thousands of sensors.
- **Evaluation** - By creating various heterogeneous environments of sensors, it is easy to evaluate the suitability of applications with anticipated failure and growth scenarios, or qualify purchases before deployment.
- **Trade Shows** - Marketing can setup powerful "Live" demonstrations at trade shows.
- **Sales Demos** - Sales can tailor presentations to the individual customer's environment.
- **Training Environments**- Realistic training scenarios can explore all possible cases. Training environment can be portable rather than based on the classroom.



MIMIC with IBM MessageSight

Components

1. **MQTT Simulator**
Simulate 100,000 MQTTv3.1 or MQTTv3.1.1 based sensors and devices. Each one can be started or stopped individually or in a group. Once started, the device starts sending and responding to the MQTT requests to/from any broker or application from anywhere in the network..
2. **SNMP Simulator**
Combine the MQTT simulation with SNMP Simulation to get a complete server behavior simulation. You can manage the server using SNMP along with the MQTT services.
3. **MIMICShell Simulator** functionality can be controlled by the MIMIC Command line interface.

Supported platforms

Linux, Windows, Cloud