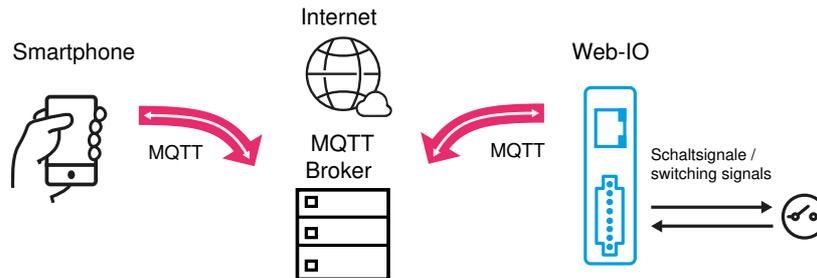


Application example for the Web-IO Digital

Control Web-IO Digital via MQTT using a smartphone

Switch consumers in the local network over the network, barrier-free from the smartphone

Until now triggering switching actions in your own home remotely has been cumbersome. Either the home firewall had to be opened up and configured, or the services of a home automation provider including their cloud access had to be employed



Now there is an alternative with the Web-IO 4.0 Digital models used together with MQTT. In MQTT protocol communication between controlling app and the switching Web-IO is not direct, but rather through any desired broker in the internet. Both communication partners connect from the local network to the broker over the internet. This connecting direction is permitted by most firewalls.

Set up broker access

There are numerous providers of free broker services. In the example shown we have chosen the broker from HiveMQ.

On the web page <https://hivemq.com> you can click in the "Hive MQ Cloud for free" area on "Get started now!". Use "Sign Up Now" to begin configuring access. Here you also provide a user name and password for access.

Set up the Web-IO for switching via MQTT

Preparation

- [Provide power to the Web-IO and connect the IOs](#)
- [Connect the Web-IO to the network](#)
- [Assign IP addresses](#)

Configuration

Log in to the web interface of the Web-IO as administrator and in the menu tree select *Communication paths >> MQTT*. Here you can assign the access data for the MQTT broker and enable *Publish and Subscribe with W&T standard topics*.

MQTT - Konfiguration ↑

MQTT: **aktiviert** i

User-Name:

Passwort:

Client ID:

Broker-IP: i

Broker-Port:

Lokaler Port:

Verschlüsselte TLS Verbindung benutzen:
 aktivieren

Verbindungsprüfung im Intervall von:
 Sekunden

MQTT Last Will: i
 konfigurieren

Publish und Subscribe mit W&T-Standard-Topics: **aktiviert (MQTT muss ebenfalls aktiviert sein)** i

<Gerätename>:

Publish aller Inputs
Topic: "<Gerätename>/get/input/<Nr.>", Payload: "ON,OFF"

Publish aller Counter
Topic: "<Gerätename>/get/counter/<Nr.>", Payload: "dez. Wert"

Publish aller Outputs
Topic: "<Gerätename>/get/output/<Nr.>", Payload: "ON,OFF"

Schalten der Outputs über Subscribe

Outputs freigeben:
Zum Schalten Publish mit Payload "ON,OFF oder TOGGLE" auf Topic "<Gerätename>/set/output/<Nr.>"

Output 0

Output 1 i

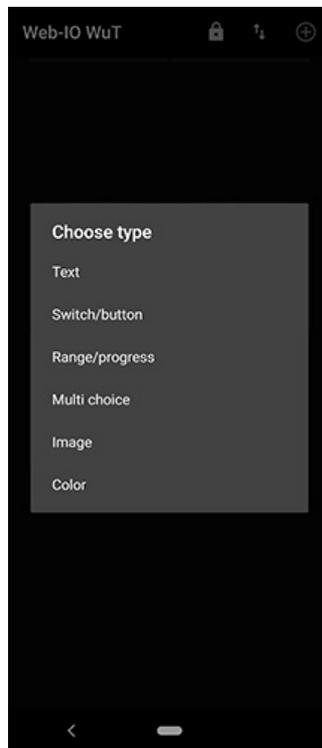
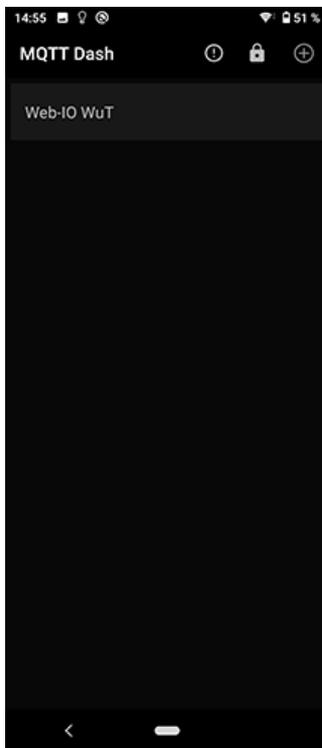
Quality of Service: i

Retain - letzten Wert an neuen Client senden:
 aktiviert

Install and configure app for MQTT

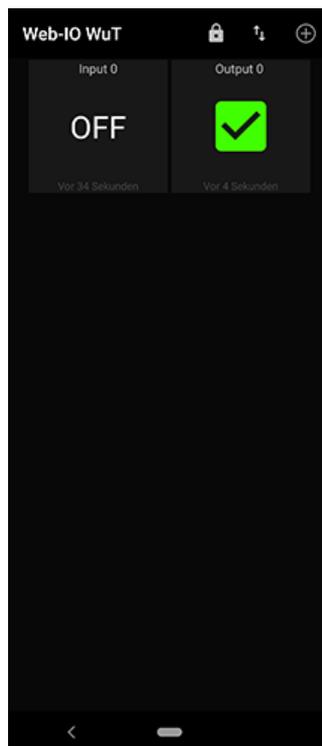
Among the numerous MQTT apps available for smartphones with the Android operating system we have decided on the free MQTT Dash app. MQTT Dash can be easily downloaded and installed from the Google Playstore.

After starting the app you can tap on the "+" symbol at upper right in the display to add an MQTT broker. In the resulting view you must enter the access data. Tapping on the diskette symbol saves the broker configuration and generates a corresponding button.



Tapping on the Broker button takes you to the IO area. Here you can use the "+" symbol to add display fields and control elements for the needed inputs and outputs. For a status display only select "Text" type. TO control your output, select Switch/button type.

As topics you can enter the standard topics of the Web-IO.



By adding additional topics, for example a Web-Thermohyrometer, you can also of course monitor other values and information such as temperature and relative humidity.

An iPhone can of course also be used with MQTT for switching and monitoring.

Products



Web-IO 4.0 Digital
2xIn, 2xOut

Power via PoE also when needed



Web-IO 4.0 Digital
12xIn, 12xOut

12x inputs,
12x outputs



Other Web-IOs

All W&T Web-IO Digital 24V



www.WuT.de

We are available to you in person:

Wiesemann & Theis GmbH

Porschestr. 12

42279 Wuppertal

Phone: +49 202/2680-110 (Mon.-Fri. 8 a.m. to 5 p.m.)

Fax: +49 202/2680-265

info@wut.de

© Wiesemann & Theis GmbH, subject to mistakes and changes: Since we can make mistakes, none of our statements should be applied without verification. Please let us know of any errors or misunderstandings you find so that we can become aware of and eliminate them.

[Data Privacy](#)