

# Advantech SE Technical Share Document

Date	2019 / 02 / 19	Related Product		
Category	■ FAQ □ SOP □ Driver Tech Note			
Abstract	How to use WebAccess MQTT Write Command			
Keyword	WebAccess/SCADA, MQTT			
Related OS	Win7, Windows Server 2008 / 2012 / 2016, Win10			
Revision History				
Date	Version	Author	Reviewer	Description
2019/02/19	V1.0	Alger Tan		
2019/3/10	V1.0		Nick Liu	

## ■ Problem Description & Architecture:

How to use 3<sup>rd</sup> party application to change WebAccess/SCADA tag value by using WebAccess MQTT write command?

Scenario:

- Edge WebAccess (project node: demo; scada node: scada)
- Cloud WebAccess (project node: myDemo; scada node: scada)
- Action: change tag t20 value to 15

## ■ Brief Solution - Step by Step:

### 1. Structure

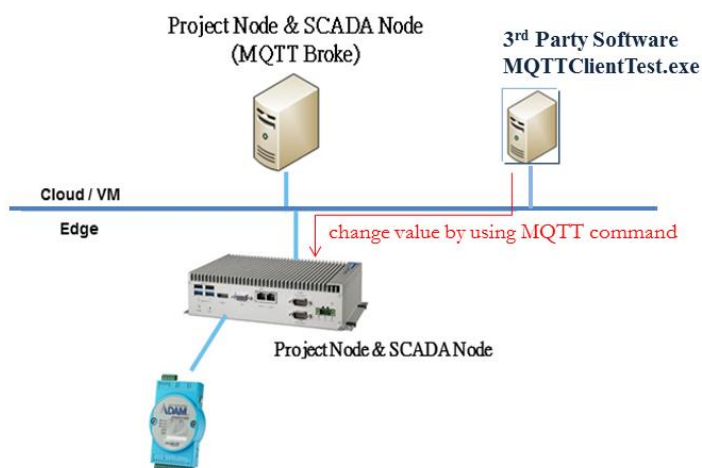


Figure 1: display b1 tag values in BwConstB.bd1

### 2. Based on WebAccess MQTT Spec 2.4.1, the following is write value command:

Write values from cloud to the device

`iot-2/evt/wacmd/fmt/group_id/dev_id`

Format: (this is only partial, not complete)

```
{
  "Cmd": "WV",
  "Val": {
    "unique string1": number,
    "unique string2": "string"
    "unique string3": {
      "0": number,
      "1": number,
      "2": number,
      ...
    }
  }
}
```

Property:

Name	Limitation	Description
unique string1~3	21	Tag ID, must be unique under same WebAccess project and can not be "(", "&", ",", ":", ".", "%", "=", "# and space. (Tag ID is mapping to WebAccess Tag Name and Tag Address)

Example: (this is the complete example)

```
{
  "d": {
    "Cmd": "WV",
    "Val": {
      "W4010-28A7_Fz1Volt": 1213.48,
      "W4010-28A7_Fz1Temp": 63.81
    }
  },
  "ts": "2015-04-17T10:19:51+08:00"
}
```

### 3. This 3<sup>rd</sup> party software, MQTTClientTest.exe

Topic:

iot-2/evt/wacmd/fmt/myDemo\_scada/demo\_scada

Message:

`{"d":{"Cmd":"WV","Val":{"t20":15}},"ts":"2019-02-11T08:44:26.667Z"}`

Note: its timestamp won't use in WebAccess/SCADA, so user still needs to input something in.

#### ■ Pin Definition (in case of serial connection):

#### ■ Reference:

WebAccess User Manual 9.2.3 Block Detail