Unity3D - MQTT
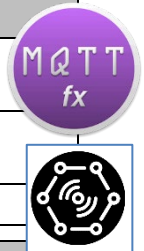
Main Topic: **Unity 3D** – MQTT Message Queuing Telemetry Transport

Keywords: Daten senden und empfangen, Topics erstellen, M2Mqtt in Unity

Lernziele
Message **Q**ueuing **T**elemetry **T**ransport verstehen und anwenden

Steps	Lernschritte
1	MQTT **Client:** https://mqttfx.jensd.de/ Version 1.7.1 Mobile: MQTT.Dash, …
2	MQTT **Server**: Eclipse MQTT Broker (Server) dmt.fh-joanneum.at Port: 1883 – User: dmt/xxxxxx (frei: test.mosquitto.org)
3	MQTT in Unity https://github.com/gpvigano/M2MqttUnity

SW	Protokoll und Infos
MQTT	Topics Home/Cook/Heater/Temperature QoS (Quality of Service), Retain-Flag
	Subscribe: stat/tasmota_alex/POWER **Publish**: cmnd/tasmota_alex/POWER toggle

C1	Steuerungscode: public class M2MqttUnityTest : **M2MqttUnityClient**
| | ```csharp
using uPLibrary.Networking.M2Mqtt;
using uPLibrary.Networking.M2Mqtt.Messages;
using M2MqttUnity;
``` |
| 01<br>02<br>03<br>04<br>05<br>06<br>07<br>08<br>09<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19 | ```csharp
public class M2MqttUnityTest : M2MqttUnityClient

client.Publish("M2MQTT_Unity/test",
  System.Text.Encoding.UTF8.GetBytes("Test message"),
  MqttMsgBase.QOS_LEVEL_EXACTLY_ONCE, false);

protected override void SubscribeTopics()
{
  client.Subscribe(new string[] { "M2MQTT_Unity/test" },
    new byte[] { MqttMsgBase.QOS_LEVEL_EXACTLY_ONCE });
}

protected override void DecodeMessage(string topic, byte[] message)
{
  string msg = System.Text.Encoding.UTF8.GetString(message);
  Debug.Log("Received: " + msg);
  if (topic == "M2MQTT_Unity/test")…
``` |
| Split | ```csharp
if (topic == "FHJ_DMT/GamePad/XYPos") {
    string[] splitString = msg.Split(" ");
    PosX = float.Parse(splitString[0]);
    PosY = float.Parse(splitString[1]);
    UnityEngine.Debug.Log("<<<<< RECEIVED: " + PosX + "/" + PosY);
}
``` |
| | ```csharp
base.Start();base.Awake(); base.Update();
``` |

FHJ_DMT/GamePad/XYPos

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C2	MQTT und Uduino…
| 01<br>02<br>03<br>04 | ```csharp
public class GameLogic : M2MqttUnityClient
{
    private UduinoManager u;
    private M2MqttUnityClient mqtt;
``` |

L	Links to MQTT Videotutorials
	Video MQTT & Tasmota Einführung: https://youtu.be/Tc9gdXy4hJA
	Video MQTT in Unity: https://youtu.be/Qn8lByEU_4A