

HMS eWON Flexy integration to AZURE IOT

How to send data using the MQTT protocol to Azure webservice from a HMS eWON Flexy

Pre-Requisites

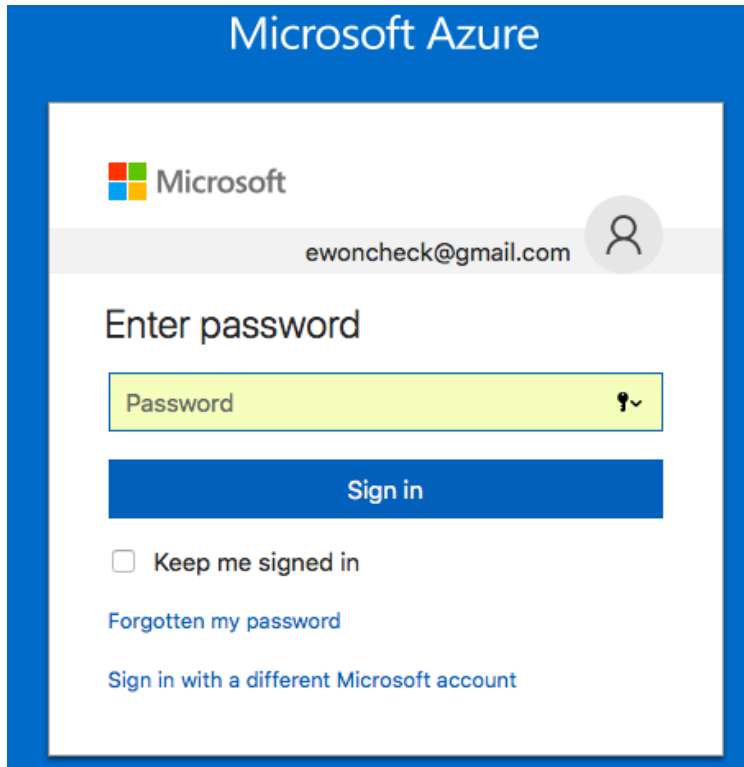
1. Make sure that the port 8883 is open in your firewall.
2. HMS eWON Flexy 20x Series with firmware version 12.2s1PR or above.
3. Azure iot webservice account.

This document does not describe on how the Azure services work or any of these services.

Setting up your Azure iot details.

Go to <https://azure.microsoft.com/en-us/services/iot-hub/>

Log into your Azure iot Account.



Microsoft Azure

Microsoft

ewoncheck@gmail.com

Enter password

Password

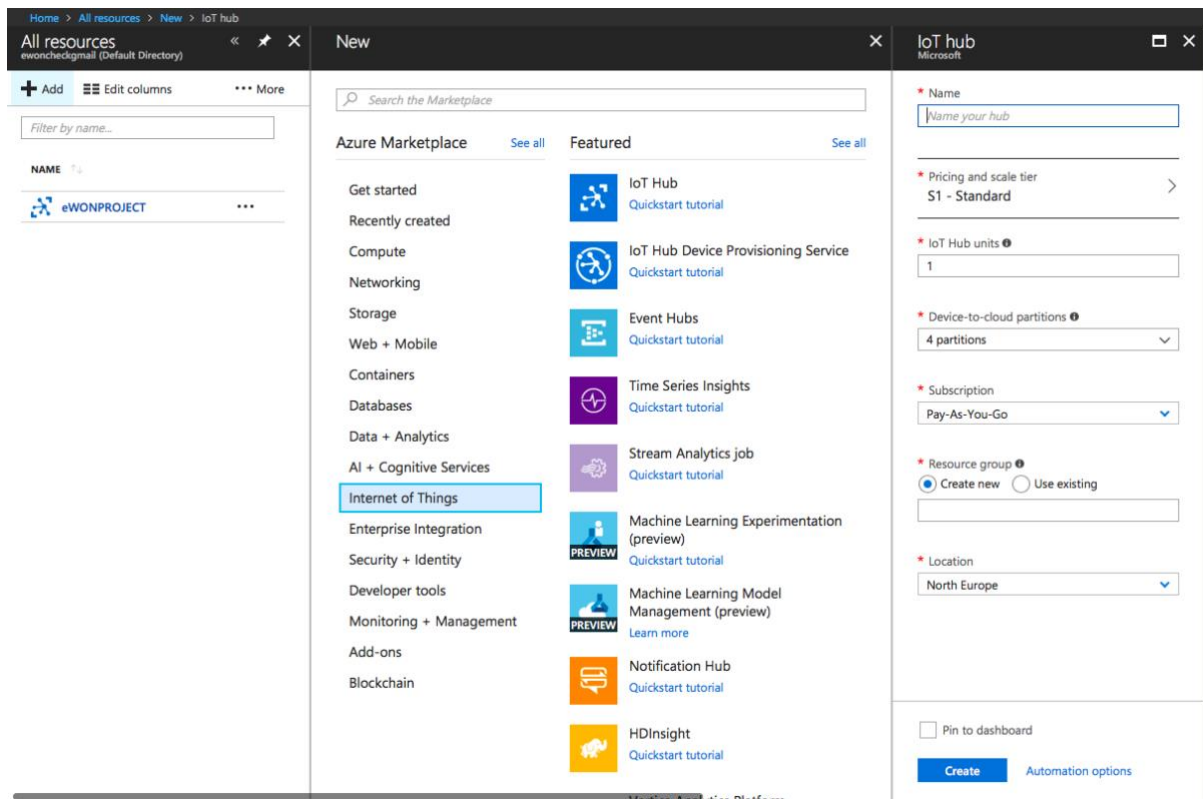
Sign in

☐ Keep me signed in

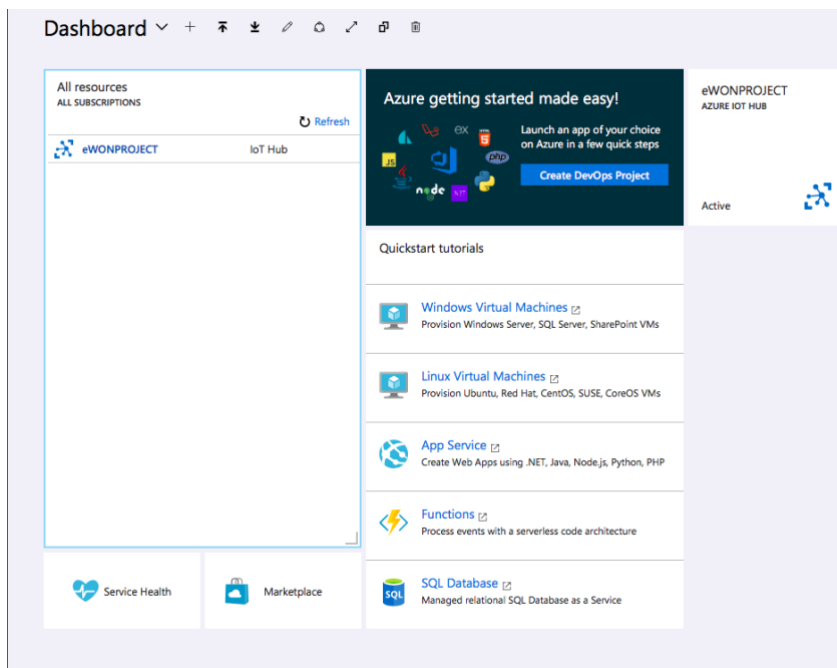
[Forgotten my password](#)

[Sign in with a different Microsoft account](#)

You will need to create a new iot hub and a new device



Once it is done, you should see something like that:



It should be the same information in your Web page. See below in the section “Connect the Flexy to the AZURE Platform”



Setting up the HMS eWON Flexy

1. Log into the HMS eWON Flexy.
2. Create your Tags
3. Copy the basic script from the post <https://techforum.ewon.biz>

Connecting to the Flexy using FTP.

1. Extract the files previously downloaded from the techforum
2. Upload the files in the Flexy attached with this documentation into the dossier “usr”
 - a. Azureiot.shtm
 - b. Azureiot_parameters.txt
 - c. BaltimoreCyberTrustRoot.pem

Connecting the Flexy to the Azure Platform

1. Open the browser and XXX.XXX.XXX.XX/usr/azureiot.shtm
2. Insert the following instructions into the page
3. Don't forget to click on “Save and Connect”

Inserting the instruction into the web page

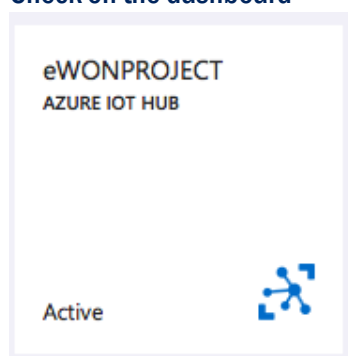
1. Device Credentials

Device Credentials
Enter the connection parameters:
Device Id:
Iot Hub Name:
SAS Token:

- a. Device id
Check in iot devices explorers

DEVICE ID	STATUS
flexy20100	enabled

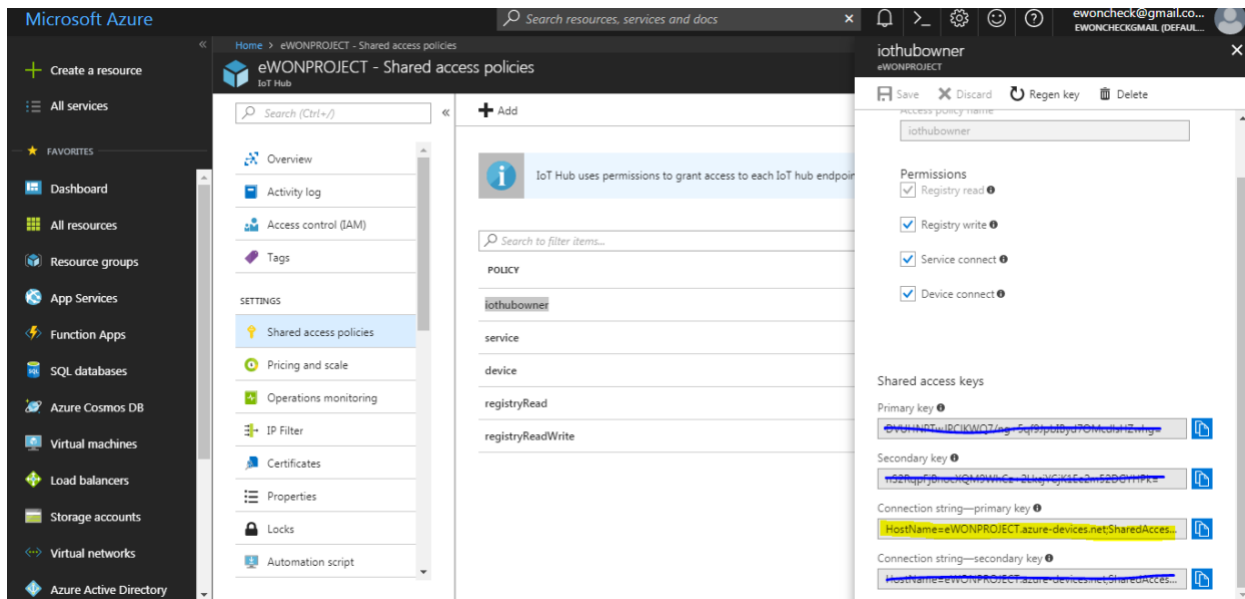
- b. Iot Hub name
Check on the dashboard



- c. SAS Token

The next step is to create the authentication token.

Get your account authentication token (Shared access> iothubowner>primary key token) and store it somewhere:

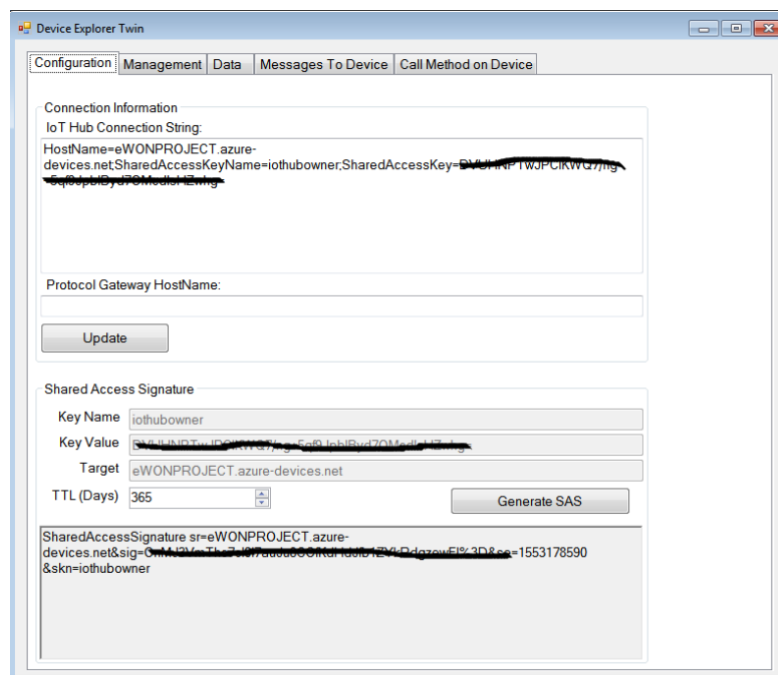


Then, download this tool:

<https://github.com/Azure/azure-iot-sdk-csharp/releases>

And install it.

Enter your account token in the first window, then click on update, then on generated SAS:





Click on the management tab. You should see your devices. If it's not the case, click on "refresh". Select your device and click on SAS Token.

Configuration Management Data Messages To Device Call Method on Device

Actions

Create Refresh Update Delete SAS Token... Twin Props.

Devices

Total: 1

	Id	PrimaryKey	SecondaryKey	PrimaryThumbf	SecondaryThui	ConnectionStrir	ConnectionStat	LastActivityTim	LastConnection	LastStateU
▶	flexy20100	AferJmAWgk...	rdLTBnLNmv...			HostName=e...	Disconnected	3/21/2018 11:...	3/21/2018 10:...	
*										

You will need to select your device, your TTL and then click on generate.

SASTokenForm

DeviceID flexy20100

DeviceKeys AtefduAWykb0JK0EEnvleclR10MhllpLh3WFP32OHym

TTL (Days) 365

HostName=eWONPROJECT.azure-devices.net;DeviceId=flexy20100;SharedAccessSignature=SharedAccessSignature sr=eWONPROJECT.azure-devices.net%2Fdevices%2Fflexy20100%2F&sig=tsdJkPtlHsCYkGwYjz5IKvcc716GxTMA65JF6ZhwZACo%3D&se=1553178745

Generate Done

You need to cut this key (from HostName to SharedAccessSignature=) to get something like that : SharedAccessSignature sr=ewons.azure-devices.net%2Fdevices%2Fewon_x86&sig=XXXXXX&se=1536388729



This will be your SAS Token

2. Timing settings

Timing Settings

Change Push Time : . Push changed tags every "Change Push Time" (in sec)

Full Push Time : . Push all tags every "Full Push Time" (in sec)

a. Change Push Time

This option allows you to push tag values if values have changed during XX seconds

b. Full Push Time

This option allows the sending all tag value every " Full Push Time" (in second)

3. Group of tags

Each selected group is sent

Select the Tag groups to send

Group A: ▼

Group B: ▼

Group C: ▼

Group D: ▼

What after a reboot?

The program reads files in your Flexy to keep the connection.