

Siri Voice control

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Introduction

The libraries and the process used are explained here

<https://medium.com/@thesanjeetc/want-to-control-something-with-siri-heres-how-bae98aceb586>

This is the used setup



Gmail account new security from 2022

You have to grant Access to your Gmail account from les secure applications

<https://www.youtube.com/watch?v=RpSQQIGTpTM>

Now it Works

You can download the scripts from here

<https://github.com/xavierflorensa/Siri-to-EtherNet-IP/tree/main>

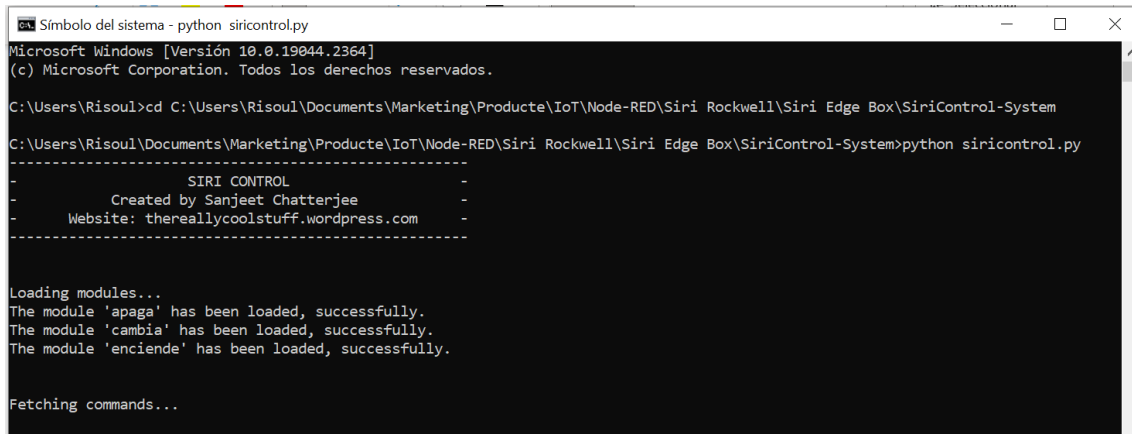
And personalize the modules for your own needs

Once you have the files on your PC go to the directory where the files are stored.

```
cd C:\Users\Risoul\Documents\Marketing\Producte\IoT\Node-RED\Siri Rockwell\Siri Edge Box\SiriControl-System
```

And execute

Python siricontrol.py



```
Símbolo del sistema - python siricontrol.py
Microsoft Windows [Versión 10.0.19044.2364]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\Risoul>cd C:\Users\Risoul\Documents\Marketing\Producte\IoT\Node-RED\Siri Rockwell\Siri Edge Box\SiriControl-System
C:\Users\Risoul\Documents\Marketing\Producte\IoT\Node-RED\Siri Rockwell\Siri Edge Box\SiriControl-System>python siricontrol.py
-----
SIRI CONTROL
Created by Sanjeet Chatterjee
Website: thereallycoolstuff.wordpress.com
-----

Loading modules...
The module 'apaga' has been loaded, successfully.
The module 'cambia' has been loaded, successfully.
The module 'enciende' has been loaded, successfully.

Fetching commands...
```

“cambia” is the topic and “5000” is the value

The Python script will recognize your voice telling:

“Oye Siri anota cambia 5000” (“Hey Siri note setup 5000”)

Then the Python script will execute a second script if the first Word is “cambia” doing this:

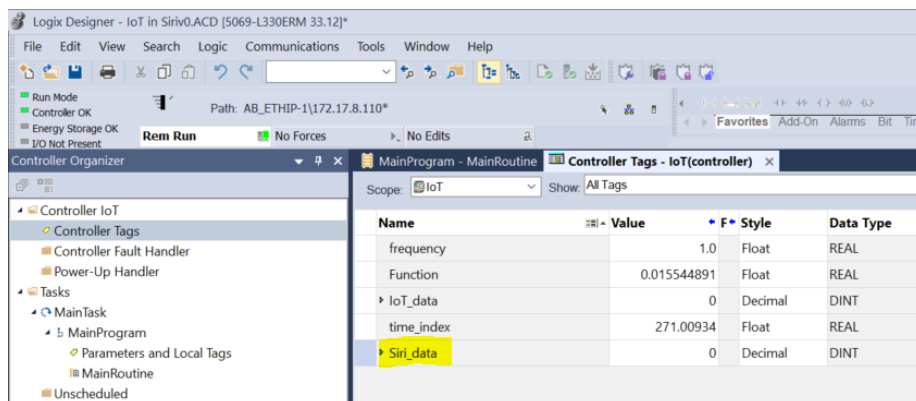
```
mosquitto_pub -t cambia -m 5000
```

So our computer is the mqtt broker. For instance mosquitto running as a start up service.

We will get this value with Node-RED and write it to the PLC.

Studio 5000 settings

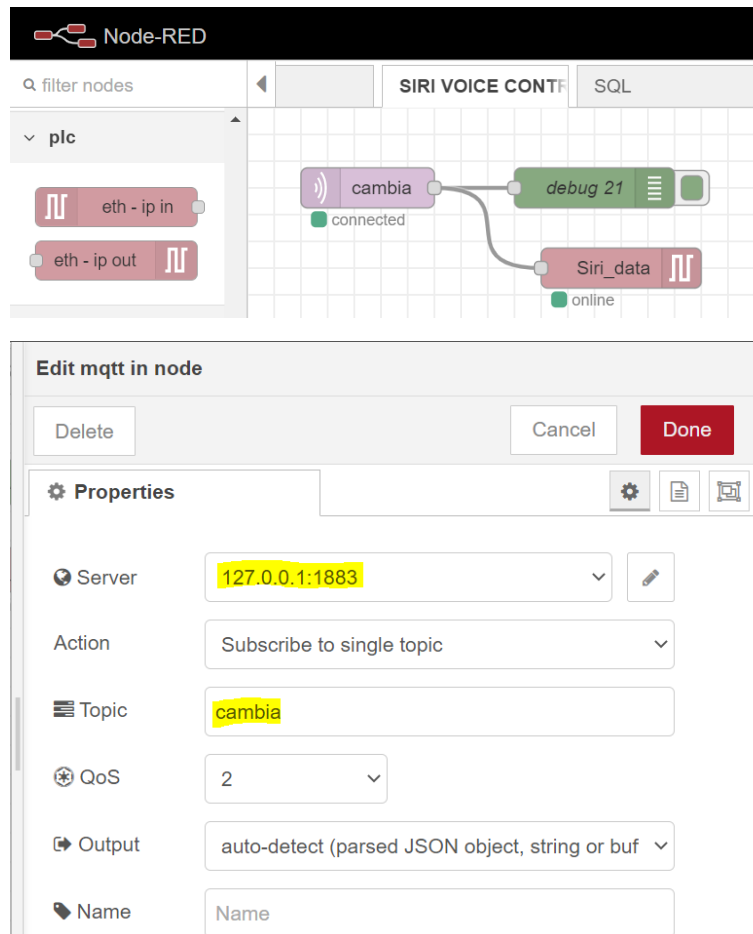
Let’s create a simple program to hold a global variable called for instance Siri_data, were we will get the voice given data



Now let’s go to Node-RED

Node-RED settings

Let's create the following Flow



Let's assume our PLC has IP address 172.17.8.110.

Our computer where Node-RED is running must be in same subnet for instance: 172.17.8.2

Edit eth-ip out node > **Edit eth-ip endpoint node**

Delete Cancel Update

Properties

Connection Tags

IP Address 172.17.8.110 Slot 0

Cycle time 500 ms

Name Name

Let's create the same variable that we have created on Studio5000

Edit eth-ip out node > **Edit eth-ip endpoint node**

Delete Cancel Update

Properties

Connection Tags

Tag list

Tag	Value	Unit	Remove
<Global>			+ Add
IoT_data	DINT		x
Siri_data	DINT		x
Tag			x

Import Export

Enabled 1 node uses this config * SIRI VOICE CONTROL

Edit eth-ip out node

Delete Cancel Done

Properties

PLC 172.17.8.110:0

Scope <Global>

Tag Siri_data

Name Name

Caution when writing data to production PLCs!

Testing the setup

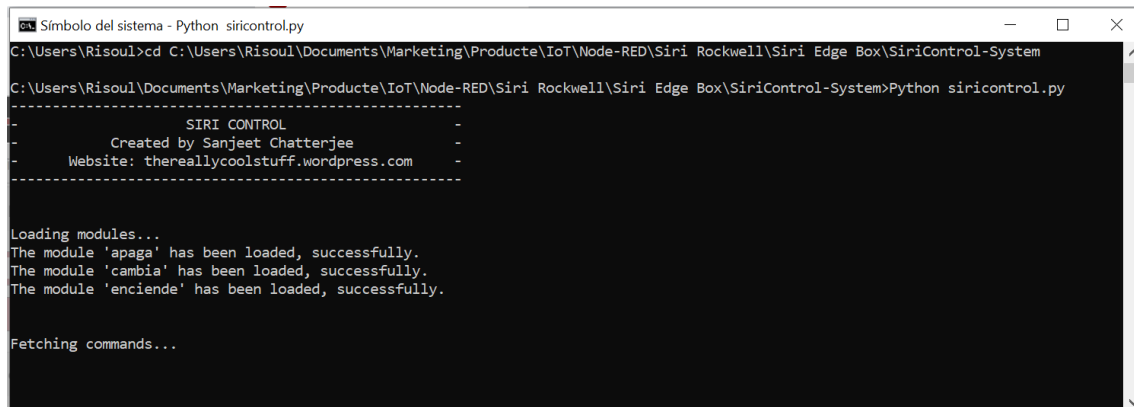
Now let's test the script

You can find the code here:

Open cmd and type

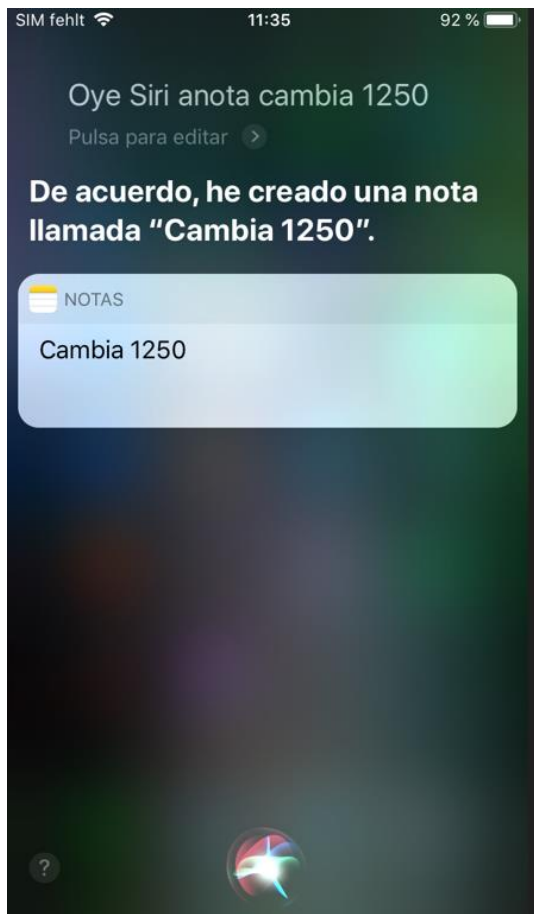
```
cd C:\Users\Risoul\Documents\Marketing\Producte\IoT\Node-RED\Siri Rockwell\Siri Edge Box\SiriControl-System
```

Python siricontrol.py



```
Simbolo del sistema - Python siricontrol.py
C:\Users\Risoul>cd C:\Users\Risoul\Documents\Marketing\Producte\IoT\Node-RED\Siri Rockwell\Siri Edge Box\SiriControl-System
C:\Users\Risoul\Documents\Marketing\Producte\IoT\Node-RED\Siri Rockwell\Siri Edge Box\SiriControl-System>Python siricontrol.py
-----
SIRI CONTROL
Created by Sanjeet Chatterjee
Website: thereallycoolstuff.wordpress.com
-----
Loading modules...
The module 'apaga' has been loaded, successfully.
The module 'cambia' has been loaded, successfully.
The module 'enciende' has been loaded, successfully.
Fetching commands...
```

Let's talk "Oye Siri anota cambia 1250"



```

Símbolo del sistema - Python siricontrol.py

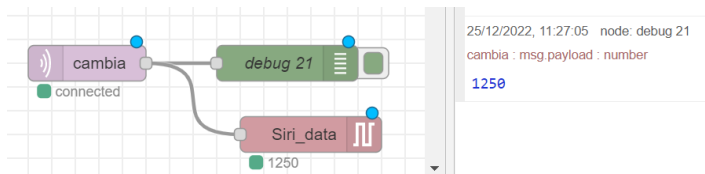
Loading modules...
The module 'apaga' has been loaded, successfully.
The module 'cambia' has been loaded, successfully.
The module 'enciende' has been loaded, successfully.

Fetching commands...

The word(s) 'cambia 1250' have been said

comando: cambia
argumento: 1250
mosquitto_pub -t cambia -m 1250
The module cambia has been executed successfully.

```



And on the PLC side

Logix Designer - IoT in Siriv0.ACD [5069-L330ERM 33.12]*

Path: AB_ETHIP-1\172.17.8.110*

Rem Run No Forces No Edits

Controller Organizer

- Controller IoT
 - Controller Tags
 - Controller Fault Handler
 - Power-Up Handler
 - Tasks
 - MainTask
 - MainProgram
 - Parameters and Local Tags
 - MainRoutine

MainProgram - MainRoutine

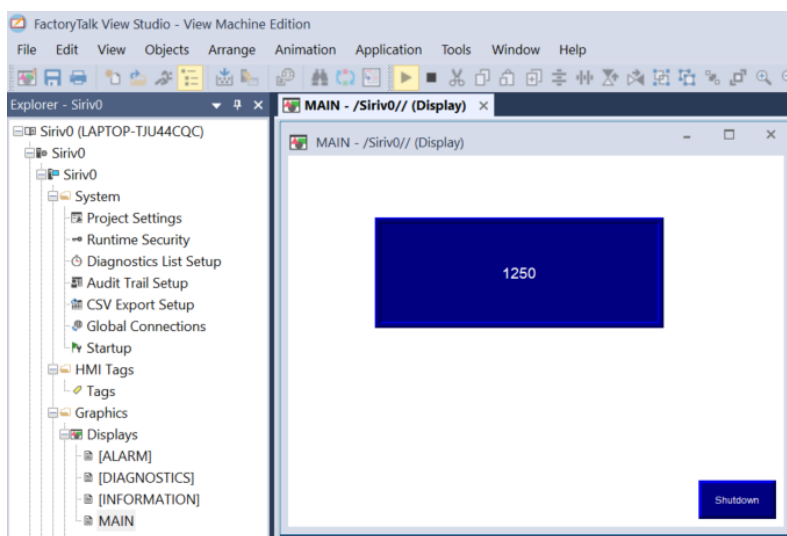
Controller Tags - IoT(controller)

Scope: IoT Show: All Tags

Name	Value	Style	Data Type
frequency	1.0	Float	REAL
Function	1.0128021	Float	REAL
IoT_data	1	Decimal	DINT
time_index	278.16043	Float	REAL
Siri_data	1250	Decimal	DINT

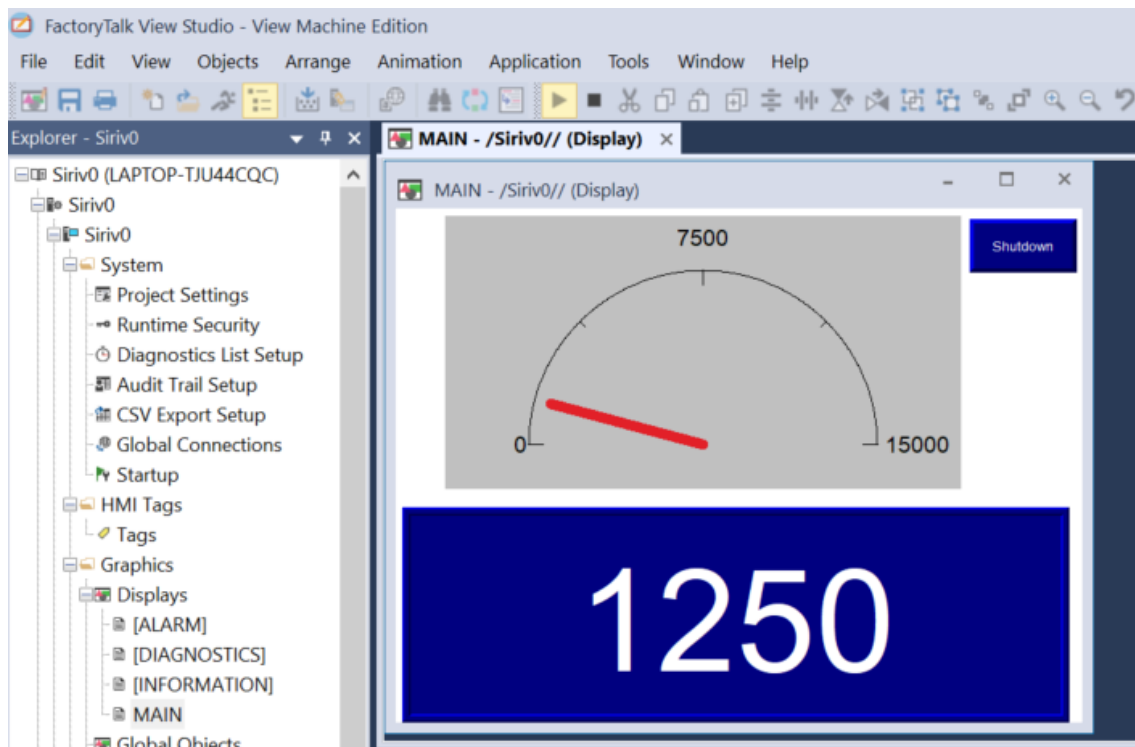
Now let's create a Factory Talk View application to display the value on an HMI.

Let's simulate it

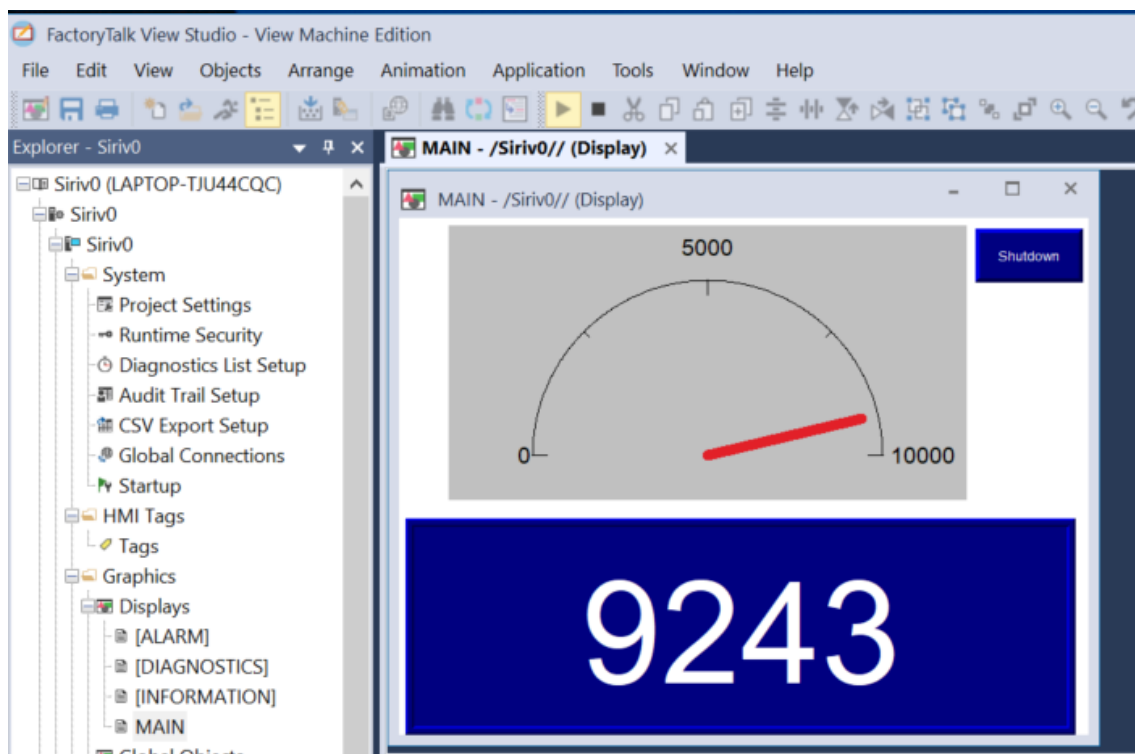


It Works,

Now let's arrange a bigger number display and a Gauge



Let's test it



If you say a number bigger than 10000 then siri introduces an . (10.000) and the system fails

Pending to fix this.

You can see the results on this video:

<https://youtu.be/5ybKLSQN04A>

This Works also with the loudspeaker HomePod.