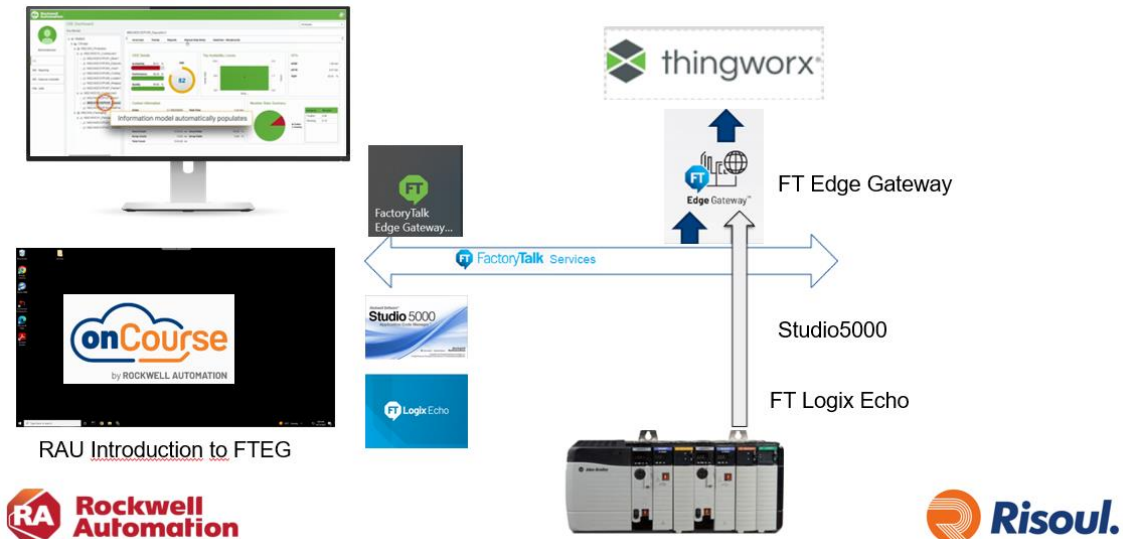


1. Inyección de datos en Thingworx en local en máquina Oncourse



Se pueden usar diferentes máquinas. Hemos hecho la prueba con la máquina RAU: Introduction to FTEG

From IoT to Dashboards
Thingworx credentials

User: Administrator

Password: Rockwell1!Rockwel1!

Seguir los pasos de curso Oncourse "From IoT to Dashboards" a partir de la página 24

La dirección del PLC físico es 192.168.1.20

Los ajustes de la página 33, punto 13 no funcionan

RAU: Introduction to FTEG
User: Administrator

Password: Rockwell@12345

IP addresses 192.168.100.201 slot 1

Cargar programa sine wave con smartobjects y poner en run

El programa de se puede descargar de aquí

https://github.com/xavierflorensa/Rockwell-sample-programs/blob/main/Sine_wave_smart_objects.ACD

	A	B	C	D	E	F	G	H	I	J
1	Program(R)	Backing tag(R)	Name	Type(R)	Collects on Parent	Update Rate (in ms)	Collects on Prog. Trigger	Collects on change	Delta in EU	Attributes =>
2	LMS	Line1	Line1	NODE						
3	LMS	Machine1	Machine1	NODE	FALSO	2000	FALSO			
4	LMS	IoT_data_lms	IoT_data_lms	DINT	VERDADERO		FALSO	FALSO		0

Edit Information model FactoryTalk Smart Object instances

General

Name: Backing tag:

Program: LMS

Edit Node FactoryTalk Smart Object instances

General

Name: Backing tag:

Program: LMS

Triggers

☒ On parent or periodic: ☐ Parent ☒ Periodic seconds

☐ On programmatic

Information attributes

☐ ThingWorx template:

Edit DINT FactoryTalk Smart Object instances

General

Name: Backing tag:

Program: LMS

Triggers

☒ On parent or periodic: ☒ Parent ☐ Periodic seconds

☐ On programmatic

☐ On value, when the value changes by engineering units

Modificar fichero ACD del Data source ya existente a1

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FactoryTalk Edge Gateway

gateway
127.0.0.1

Online

Gateway connection: Online

Overview
Settings
Data Flow
Data Sources
Models
Applications
twx-process
twx-consumption
mqtt-app2
thingworx-app10
mqtt-app
thingworx-app5

1 Define Drivers

Name	Type
driver-cip	EtherNet/IP (CIP)
driver-opcda	KEPServer Enterprise (OPC DA)

2 Configure Data Sources

Name	Data Source Type	Status	Driver	Collection
a1	Logix Project File (ACD)	Populated	driver-cip	192.168.1.1
a3-legacy-ra	Logix Controller via Et...	Populated	driver-cip	192.168.1.1
utilitycontroller	KEPServer Enterprise ...	Populated	driver-opc...	Kepw...
a2	Logix Project File (ACD)	Populated	driver-dp	192.168.1.1

Crear nueva aplicación thingworx

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FactoryTalk Edge Gateway

gateway
127.0.0.1

Gateway connection: Online

Overview
Settings
Data Flow
Data Sources
Models
Applications
twx-process
twx-consumption
mqtt-app2
thingworx-app10
mqtt-app
thingworx-app5

Application Name
thingworx-app5

Store and forward

ThingWorx Server Host Name
ftg.localdomain

ThingWorx Server Port
443

ThingWorx Server Application Key

ThingWorx Logging Level

Configurarla

FactoryTalk Edge Gateway

gateway 127.0.0.1 Online

Gateway connection: Online

Overview
Settings
Data Flow
Data Sources
Models
Applications

Applications

Name	Type	Licensed tags
twx-process	ThingWorx	0
twx-consumption	ThingWorx	3
mqtt-app2	MQTT	1
thingworx-app10	ThingWorx	2
mqtt-app	MQTT	1
thingworx-app5	ThingWorx	1

FactoryTalk Edge Gateway

gateway 127.0.0.1 Online

Gateway connection: Online

Overview
Settings
Data Flow
Data Sources
Models
Applications

Applications

thingworx-app5

ThingWorx

Models

Add models to bind them to the application.

Select

Line1

Preview

To remove tags, deselect them from the Tags and Models selection pane on the left.

Machine1_Jafriz71

#IoT_data_lms -- LMSIoT_data_lms

0 tag(s) 1 model(s) Save Cancel

Los datos van pasando

FactoryTalk Edge Gateway

gateway 127.0.0.1 Online

Gateway connection: Online

Overview
Settings
Data Flow
Data Sources
Models
Applications

Applications

thingworx-app5

ThingWorx Logging Level

Error

ThingWorx Logging Verbose

Save Cancel

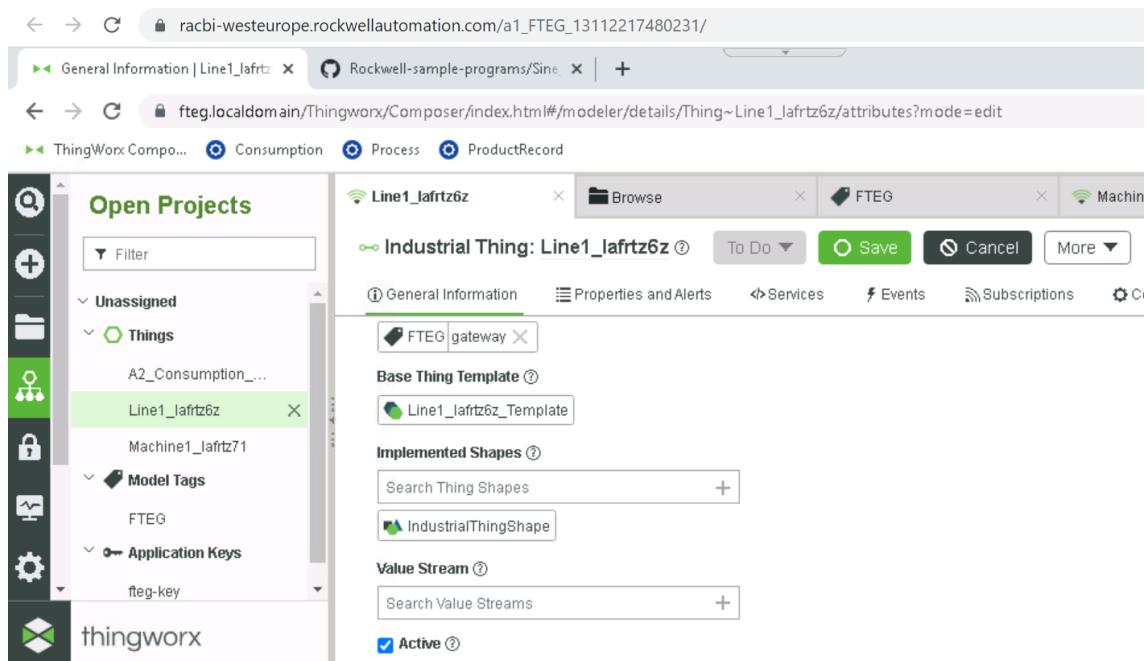
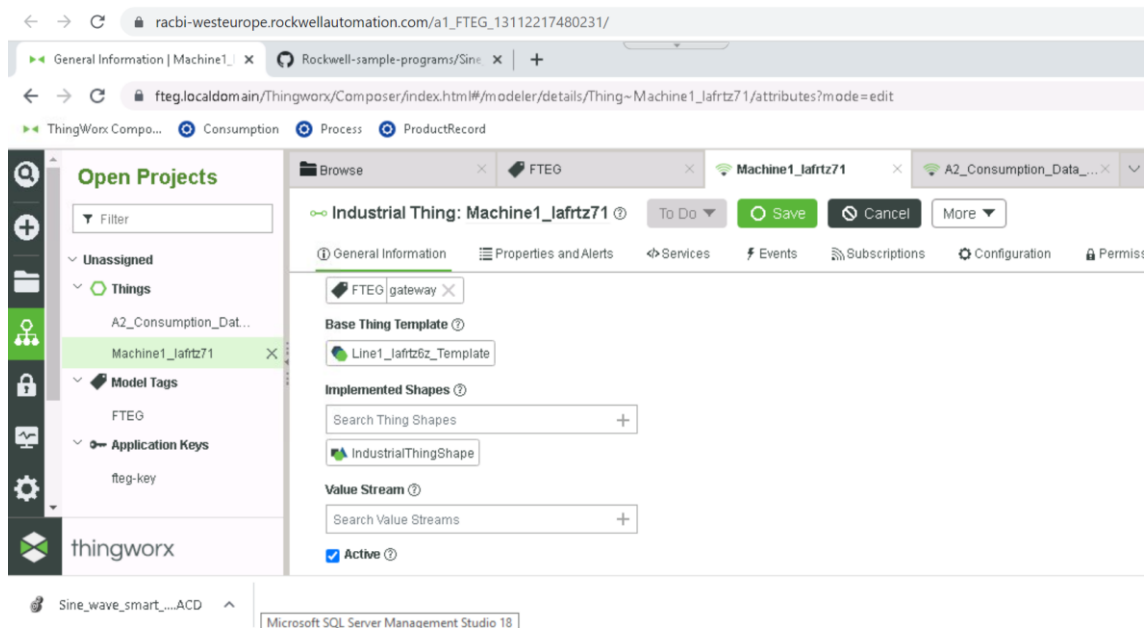
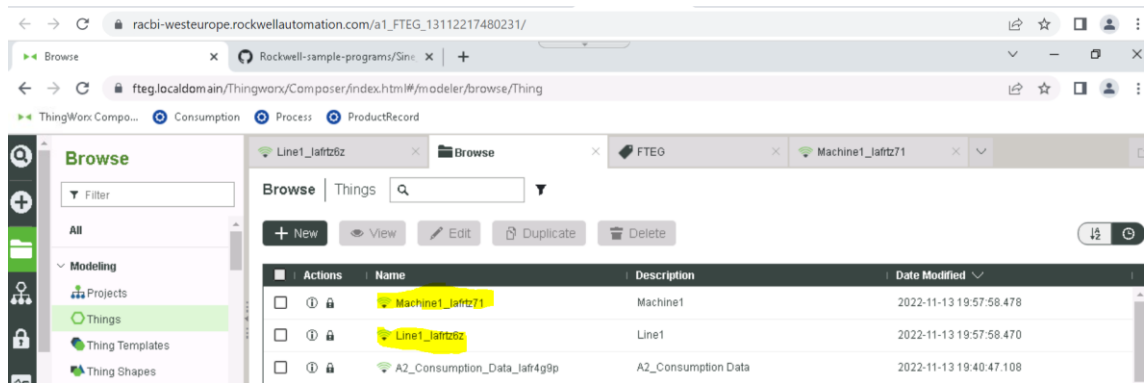
Data Flow Error Log Licensed tags

Enable data flow

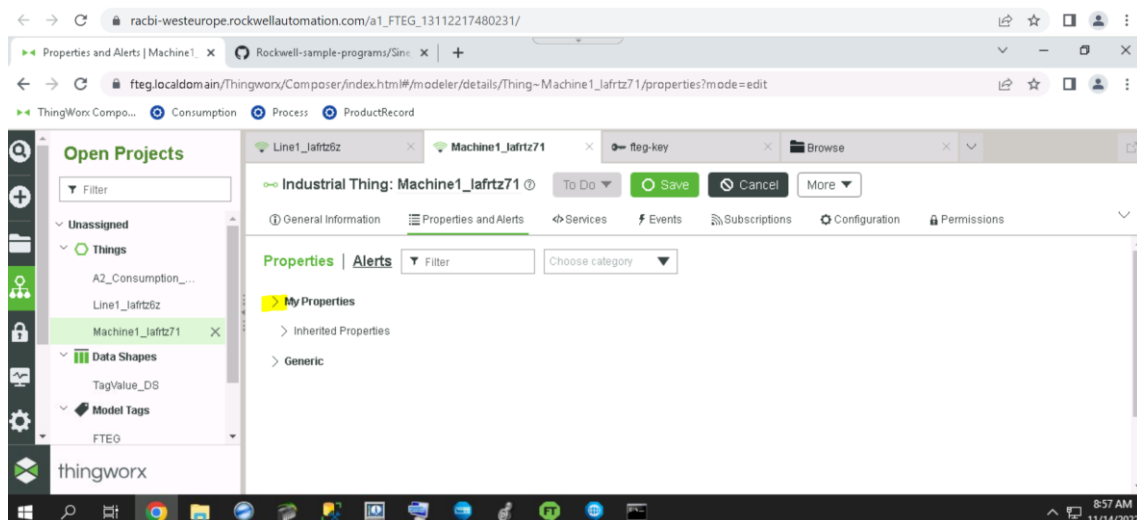
Tag Name	Data Source	Value	Quality	Time
Line1.Machine1_IoT_data_lms	a1	56	192	2022-11-13T20:03:13.198Z

1 tag(s)

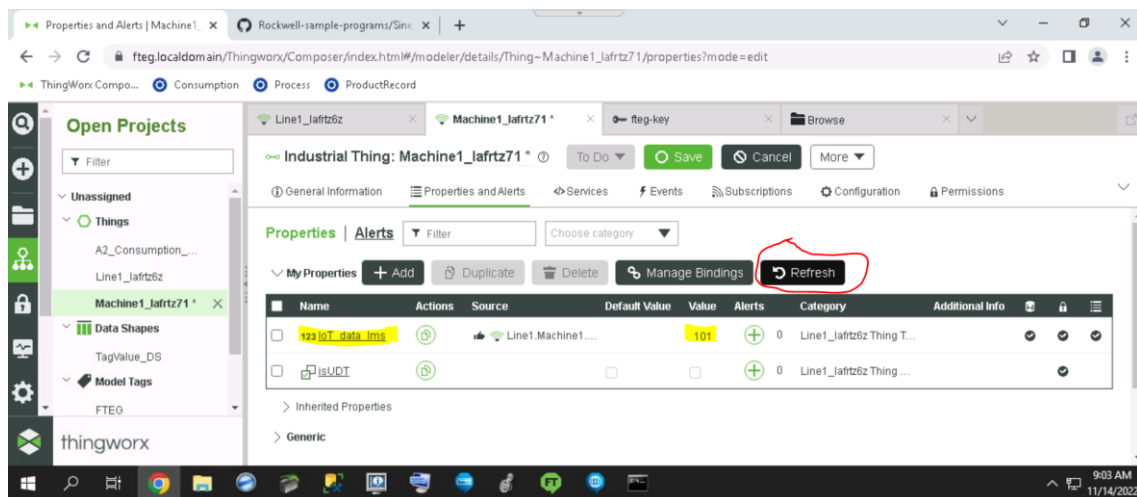
El nuevo modelo se ha insertado pero no vemos el Tag # (aunque así queda en otros ejercicios Oncourse)



Click on Thing / properties and alerts / My properties



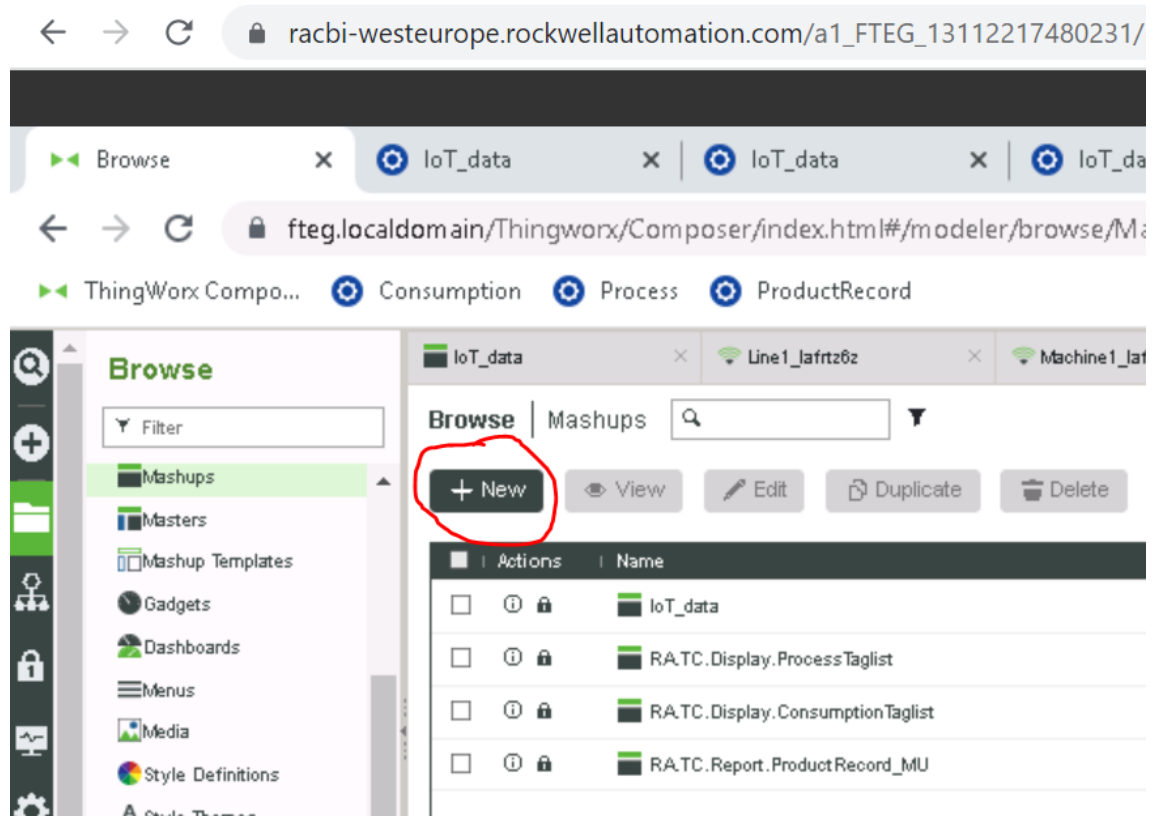
Si le damos a refresh veremos cómo va evolucionando la variable



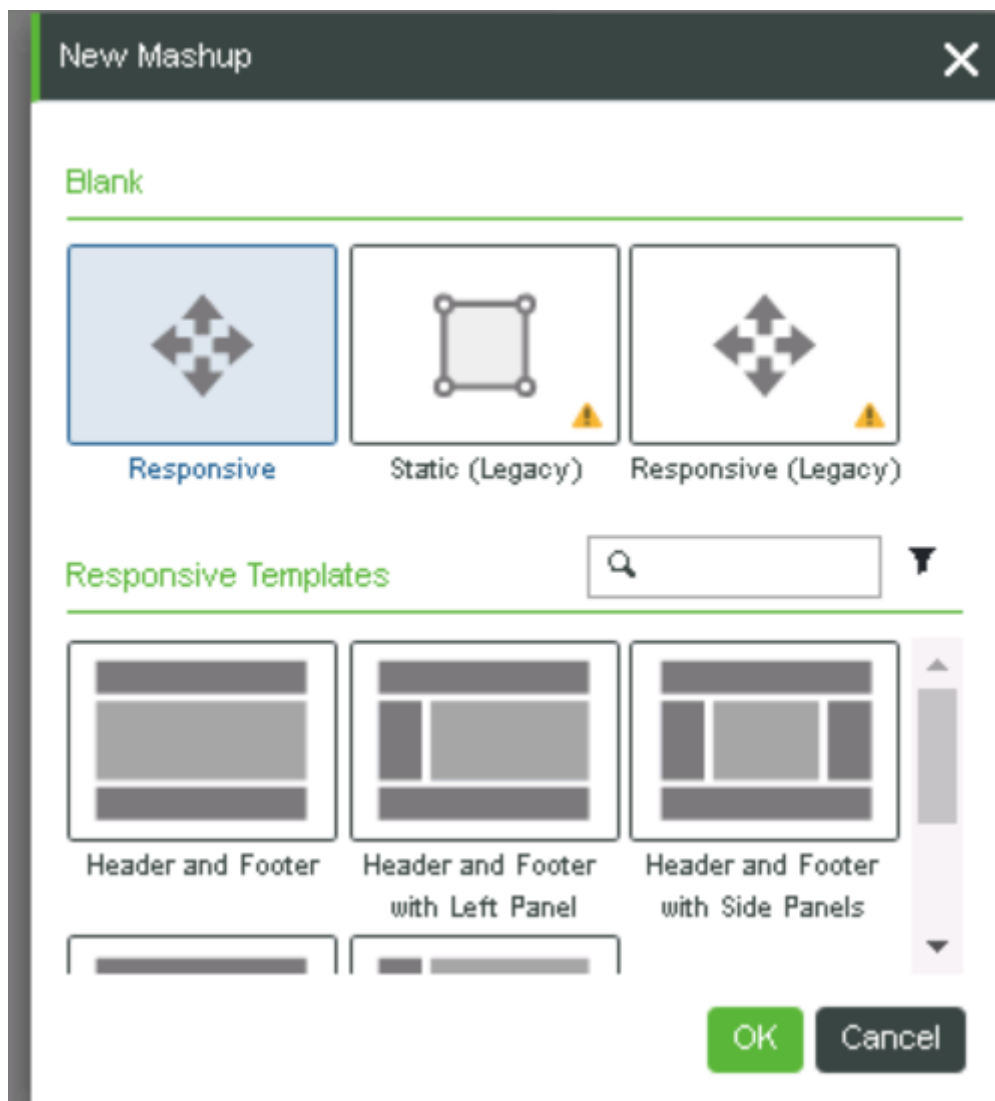
Diseñar un mashup

Seguimos estos pasos

<https://developer.thingworx.com/resources/learning-paths/getting-started-on-thingworx-platform/thingworx-foundation-quickstart>



Responsive y OK



Dar un nombre y seleccionar un proyecto de los que tengamos creados

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General Information x IoT_data x IoT_data x IoT_data

ft eg.localdomain/Thingworx/Composer/index.html#/modeler/details/create~ Mashu

ThingWorx Compo... Consumption Process ProductRecord

Open Projects

Filter

- FTEG
 - Mashups
 - IoT_data
 - Unassigned
 - Things
 - A2_Consumption_...
 - Line1_jafritz6z
 - Machine1_jafritz71
 - Data Shapes
 - Tag\alue_DS
 - Model Tags
 - FTEG
 - Mashups

Mashup: New Mashup - 1 *

View Mashup To Do Save

General Information Design Custom CSS Mobile Settings

General Information

No image available

Name (required) IoT_data1

Change

Advanced Search

+ New Project

FTEG

Search Projects +

Tags

racbi-west europe.rockwellautomation.com/a1_FTEG_13112217480231/

General Information x IoT_data x IoT_data x IoT_data

ft eg.localdomain/Thingworx/Composer/index.html#/modeler/details/create~ Mashup~ New%25

ThingWorx Compo... Consumption Process ProductRecord

Open Projects

Filter

- FTEG
 - Mashups
 - IoT_data
 - Unassigned
 - Things
 - A2_Consumption_...
 - Line1_jafritz6z
 - Machine1_jafritz71
 - Data Shapes
 - Tag\alue_DS
 - Model Tags
 - FTEG
 - Mashups

Mashup: New Mashup - 1 *

View Mashup To Do Save Cancel

General Information Design Custom CSS Mobile Settings

General Information

No image available

Name (required) IoT_data1

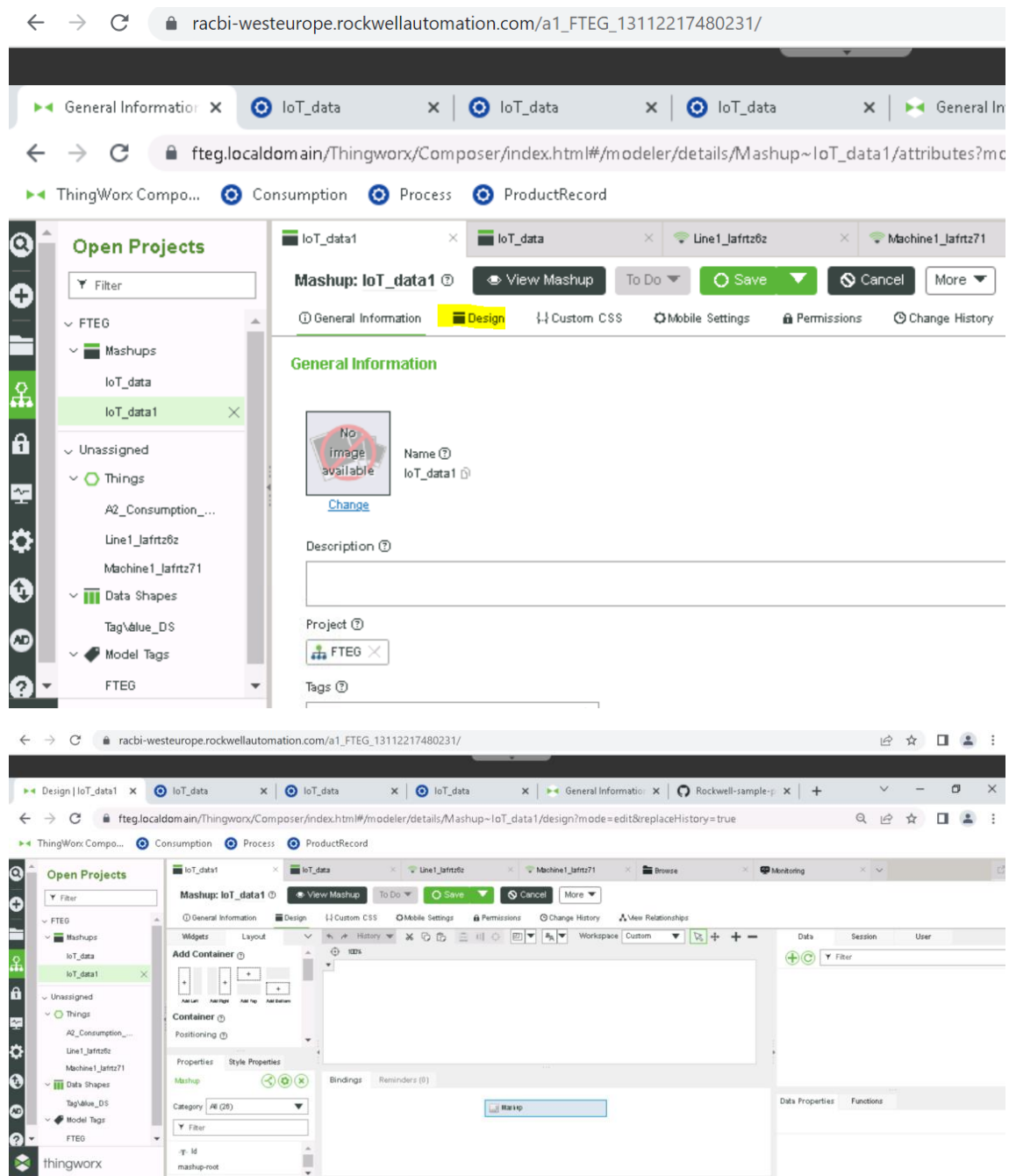
Change

Description

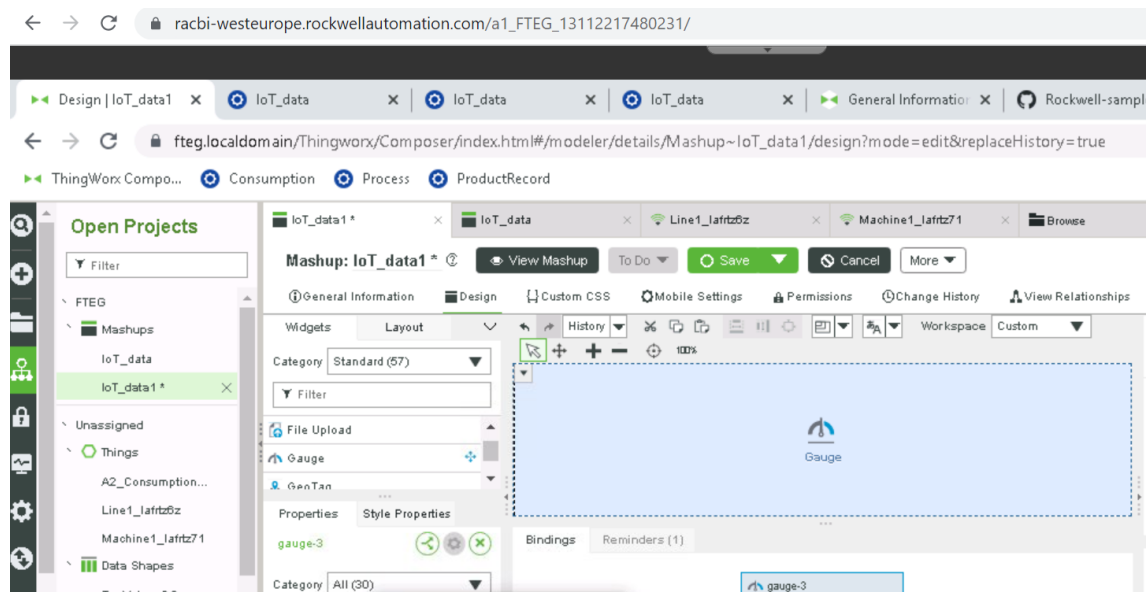
Project FTEG

Tags

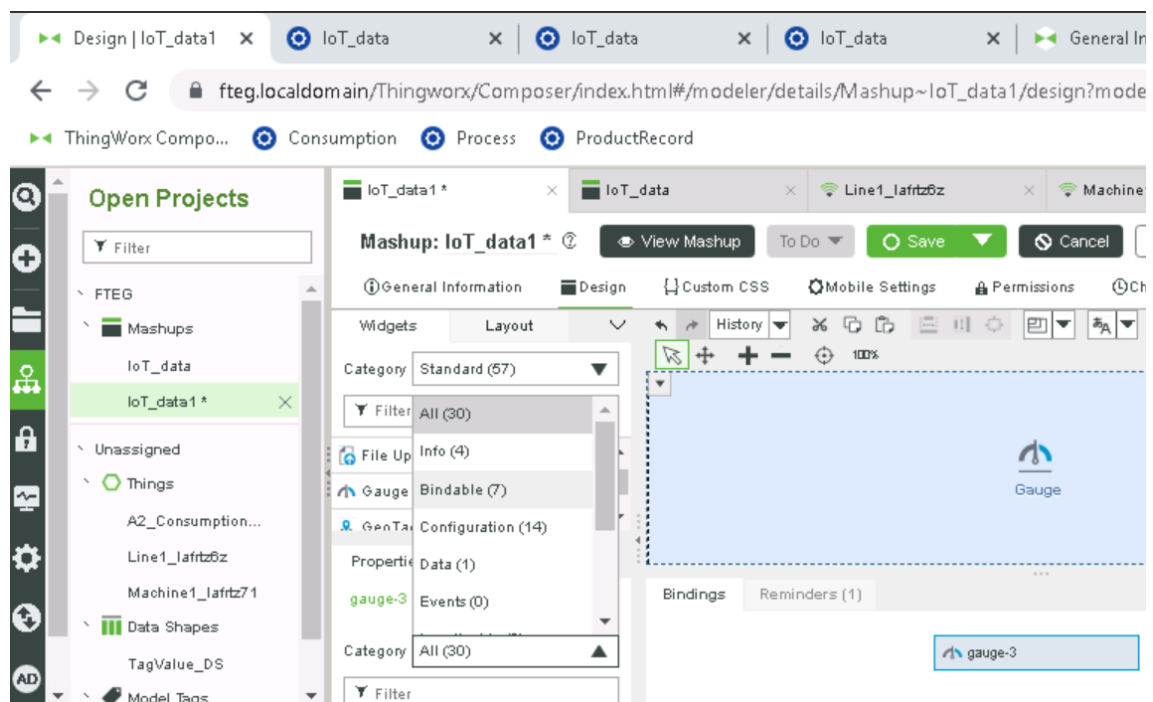
Click en Save e ir a Design



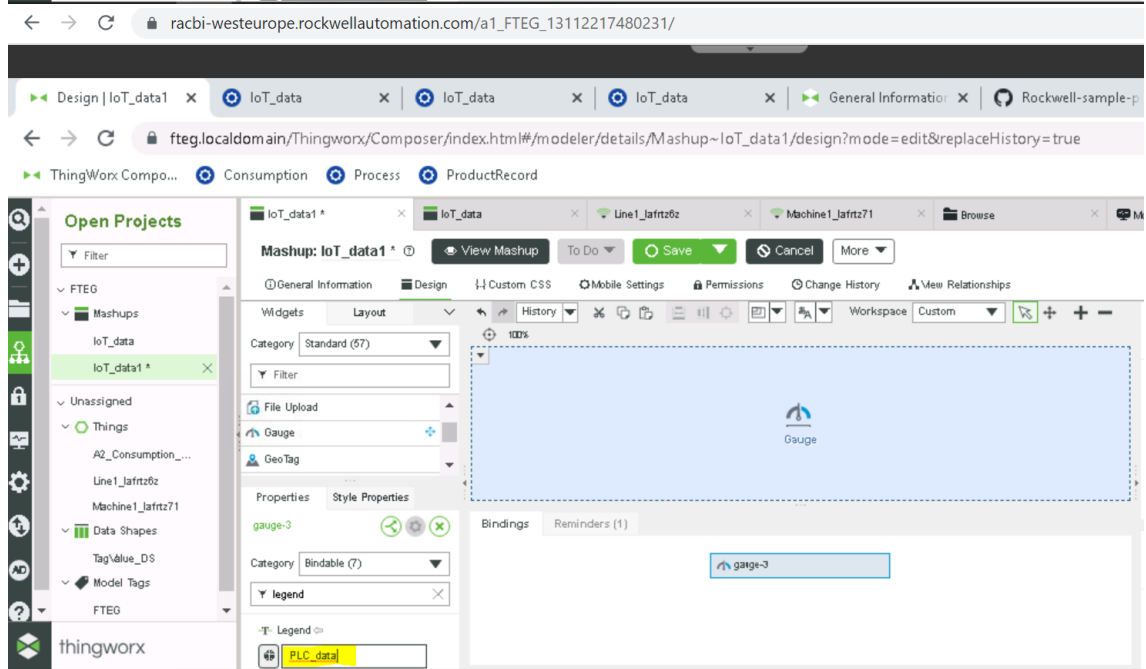
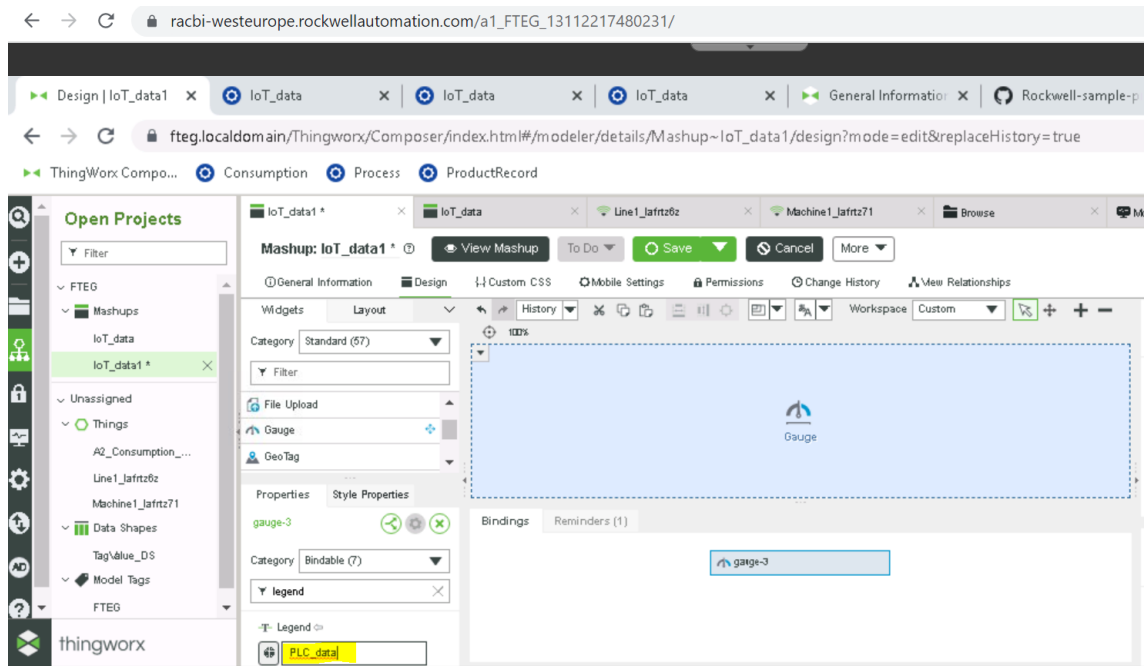
Ir a widgets seleccionar gauge y arrastrar sobre el lienzo en la parte central



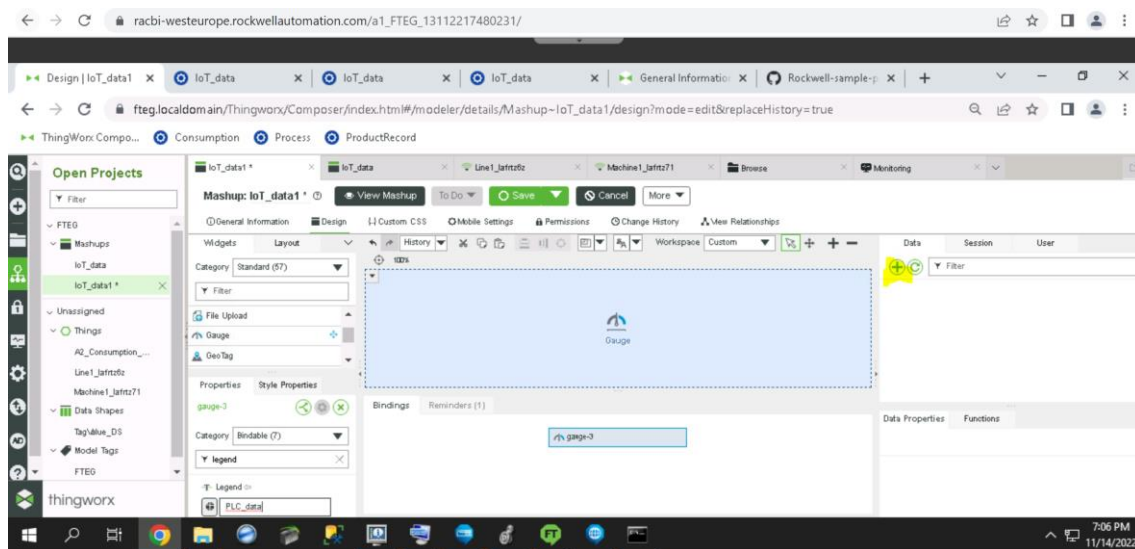
Seleccionar bindable



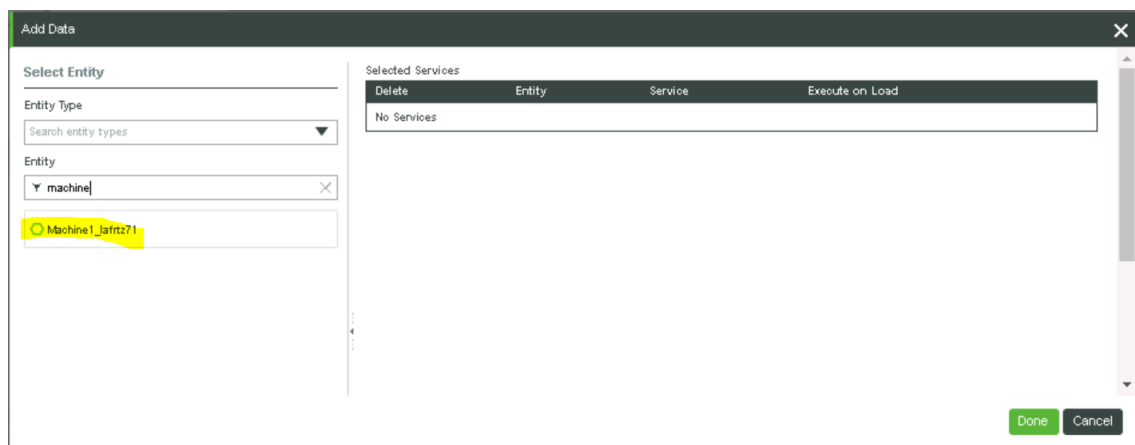
En legend le escribimos el texto que queremos que aparezca



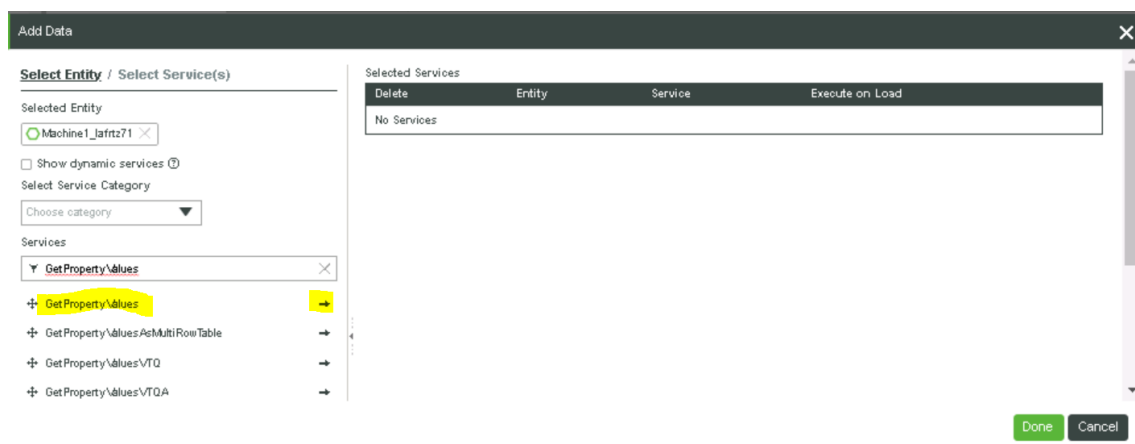
Le damos a + en add data



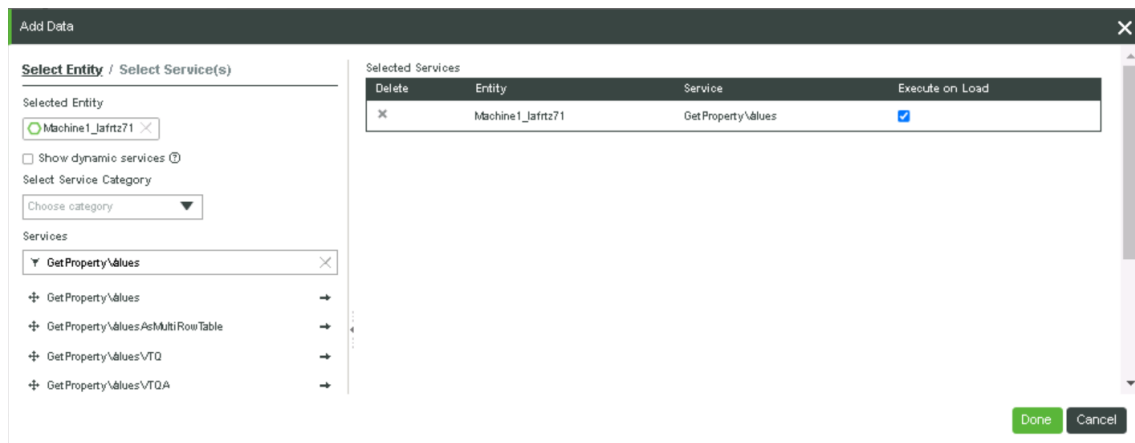
Buscamos el thing machine y hacer click cuando lo encontremos



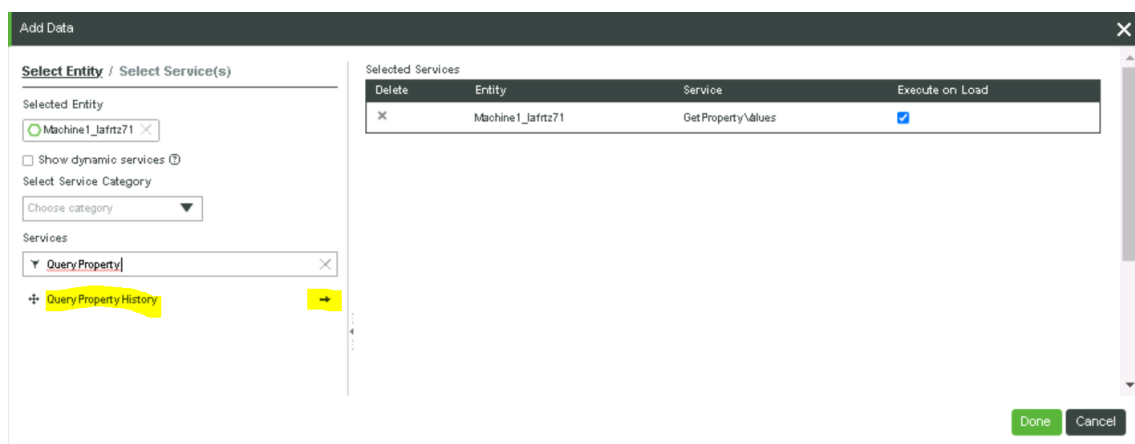
Buscar GetPropertieValues y darle a la flecha



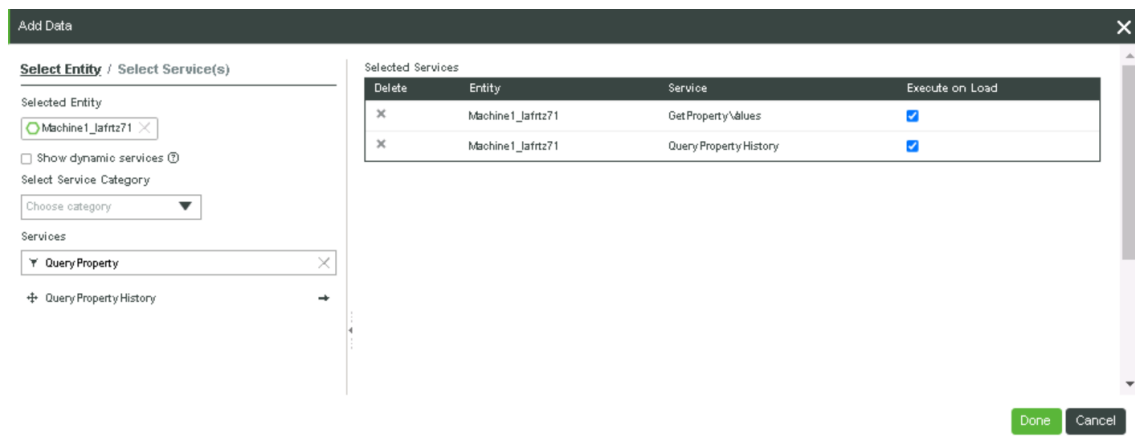
Marcar execute on Load



Buscar QueryPropertyHistory y darle a la flecha

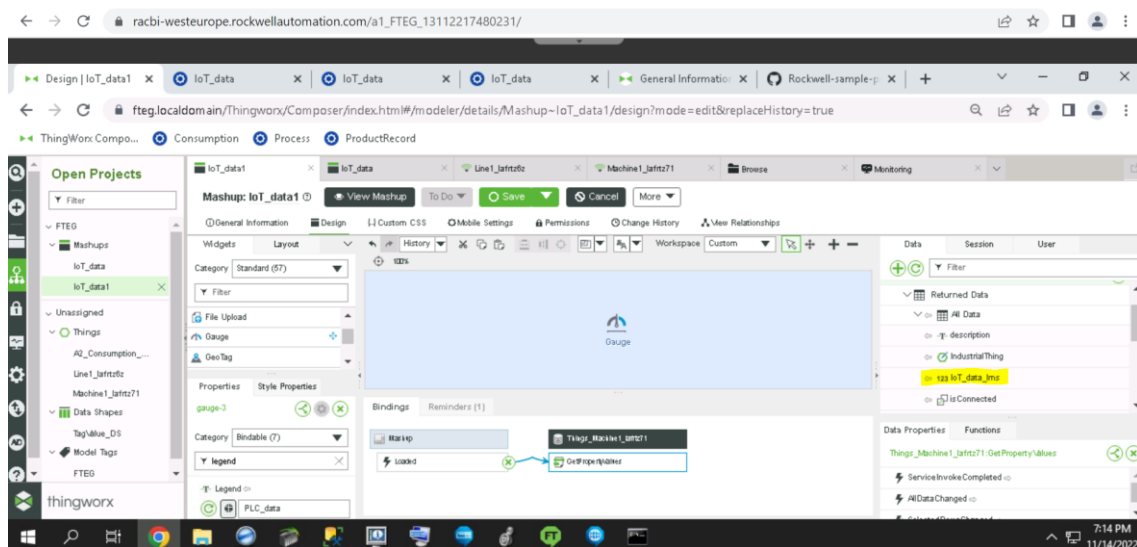
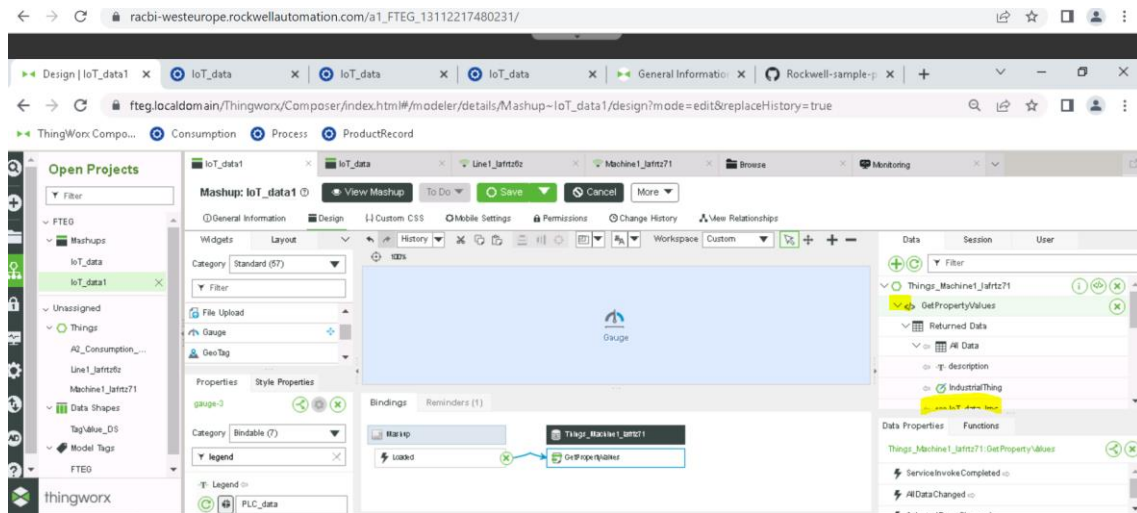


Darle a Done

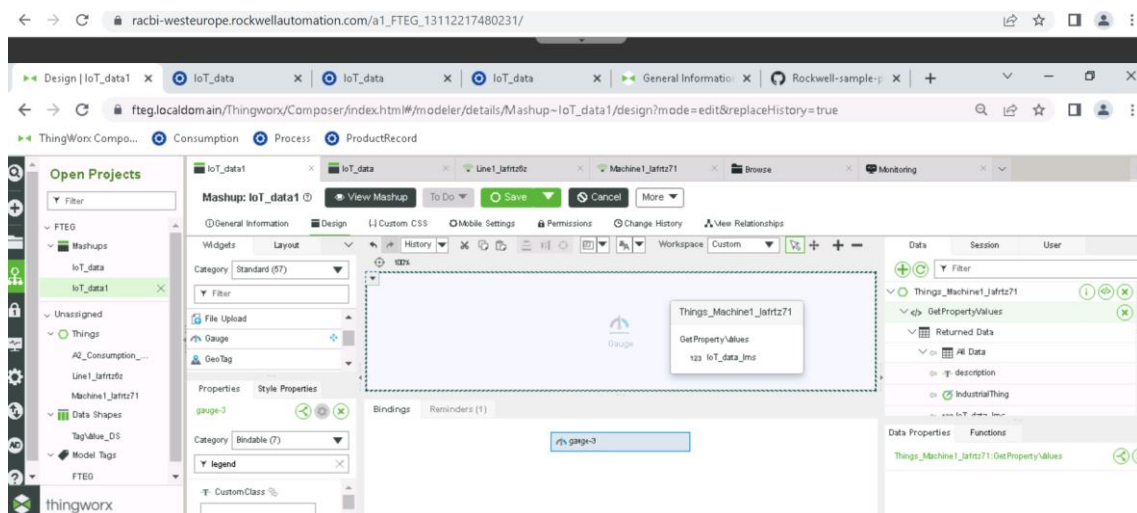


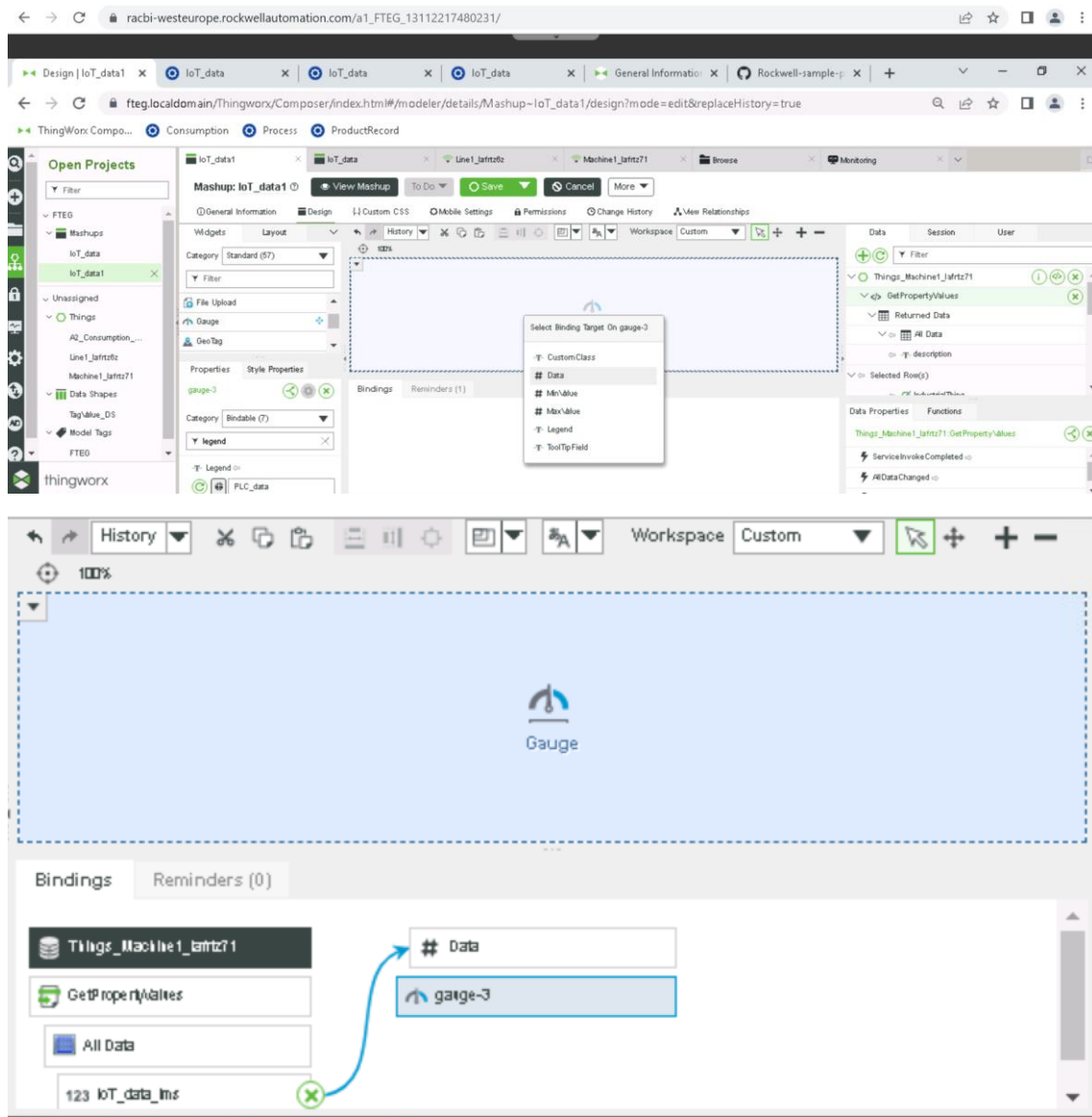
Darle a Save

Desplegar y buscar nuestra variable IoT_data

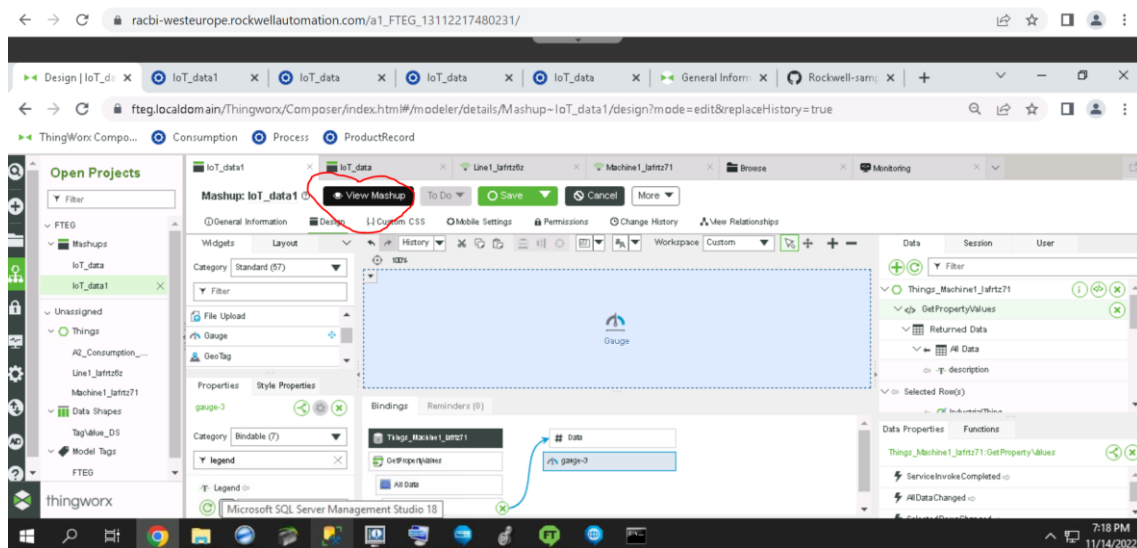


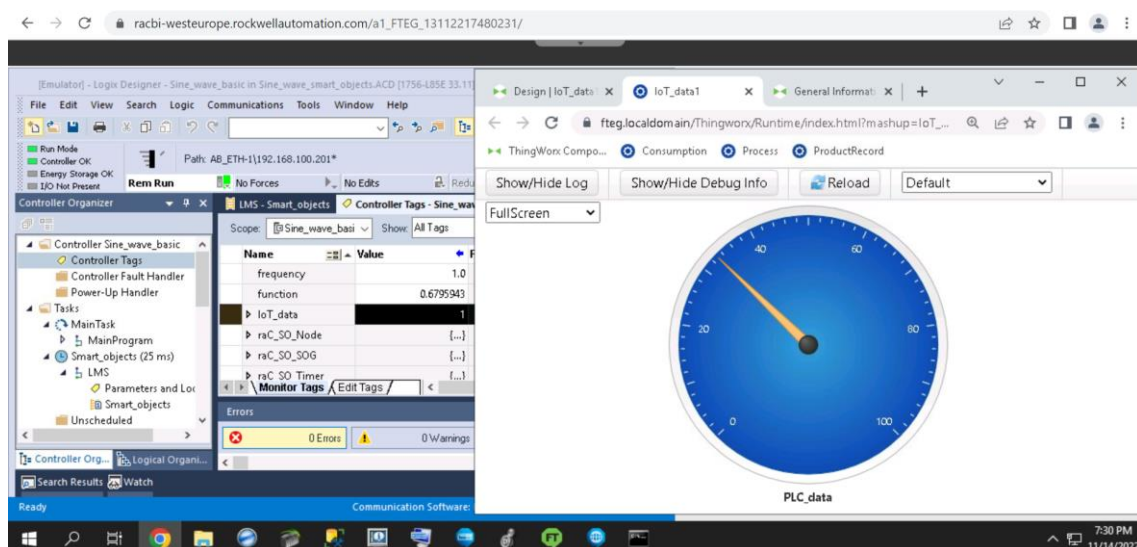
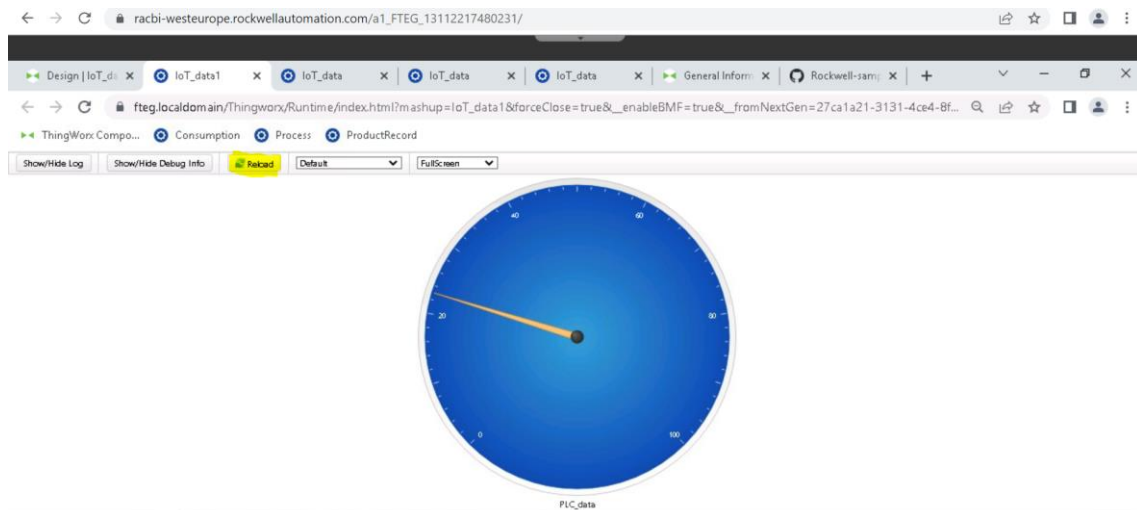
Arrastrarla sobre Gauge y cuando me pregunte que es lo que quiero, indicarle Data





Darle a save y a view mashup





As you can see on this video

<https://youtu.be/mnyUrhCx-M4>