

## inicialización de thingsboard

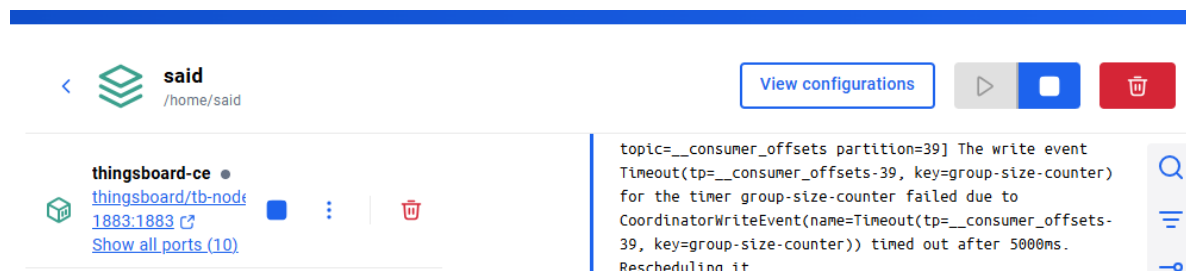
```
Seleccionar said@DESKTOP-3LCKMFC: ~
watch      Watch build context for service and rebuild/refresh containers when files are updated
Run 'docker compose COMMAND --help' for more information on a command.
unknown docker command: "compose open"
said@DESKTOP-3LCKMFC:~$ docker compose run thingsboard-ce
[+] Creating 2/2
  Container said-postgres-1   Running    0.0s
  Container said-kafka-1      Running    0.0s
Starting 'ThingsBoard Node Microservice' ...
OpenJDK 64-Bit Server VM warning: Option UseBiasedLocking was deprecated in version 15.0 and will likely be removed in a future release.

  ThingsBoard

=====
:: ThingsBoard ::      (v4.2.0)
=====

2025-09-29 13:28:49,055 [background-preinit] INFO  o.h.validator.internal.util.Version - HV000001: Hibernate Validator 8.0.2.Final
2025-09-29 13:28:49,316 [main] INFO  o.t.s.ThingsboardServerApplication - Starting ThingsboardServerApplication v4.2.0 using Java 17.0.16 with PID 1 (/usr/share/thingsboard/bin/thingsboard.jar started by thingsboard in /usr/share/thingsboard/bin)
2025-09-29 13:28:49,318 [main] INFO  o.t.s.ThingsboardServerApplication - No active profile set, falling back to 1 default profile: "default"
2025-09-29 13:28:50,326 [main] WARN  o.s.c.a.AnnotationTypeMapping - Support for convention-based annotation attribute o
```

## Contenedor de Docker.



## Docker en funcionamiento:

```
said@DESKTOP-3LCKMFC:~$ docker-compose up -d
[+] Running 3/3
  Container said-kafka-1      Running
  Container said-postgres-1   Running
  Container said-thingsboard-ce-1 Running
```

## Thingsboard en local host:

ThingsBoard Dispositivos

Inicio Alarmas Tableros Entidades Dispositivos Activos Vistas de entidad Gateways Perfiles Customers Cadenas de reglas Gestión de Edge Funciones avanzadas Recursos

Dispositivos Filtro de dispositivo

	Hora de creación ↓	Nombre	Perfil de dispositivo	Etiqueta	Estado	Customer	
<input type="checkbox"/>	2025-08-26 07:43:48	Esp32	default	esp32	Inactivo		
<input type="checkbox"/>	2025-08-25 08:23:43	Thermostat T2	thermostat		Inactivo		
<input type="checkbox"/>	2025-08-25 08:23:43	Thermostat T1	thermostat		Inactivo		
<input type="checkbox"/>	2025-08-25 08:23:42	Raspberry Pi Demo Device	default		Inactivo		
<input type="checkbox"/>	2025-08-25 08:23:42	DHT11 Demo Device	default		Inactivo		
<input type="checkbox"/>	2025-08-25 08:23:42	Test Device C1	default		Inactivo	Customer C	
<input type="checkbox"/>	2025-08-25 08:23:42	Test Device R1	default		Inactivo	Customer B	

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## Dispositivo:

Esp32 Detalles del dispositivo

Detalles Atributos Última telemetría Campos calculados Alarmas

Abrir página de detalles Hacer público el dispositivo Asignar al customer

Gestionar credenciales Verificar conectividad Eliminar dispositivo

Copiar ID del dispositivo Copiar token de acceso

Nombre\* Esp32

Perfil de dispositivo\* default

Etiqueta esp32

Firmware asignado

<input type="checkbox"/>	Hora de creación ↓	Nombre	Perfil de dispositivo	Etiqueta	Estado	Customer	
<input type="checkbox"/>	2025-08-26 07:43:48	Esp32	default	esp32	Inactivo		







## Mosquito:

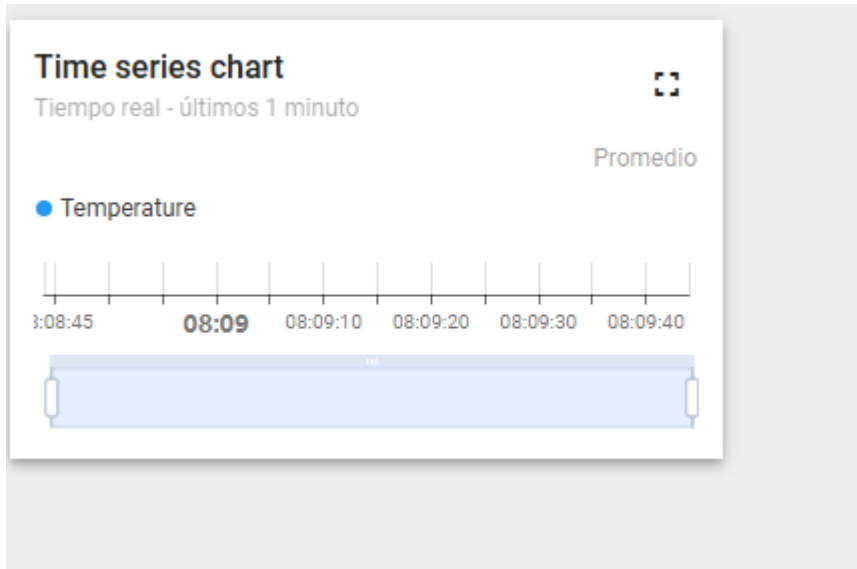
```

said@DESKTOP-3LCKMFC:~$ mosquitto_pub -d -q 1 -h localhost -p 1883 -t v1/devices/me/telemetry -u "LPaXw3DpN0PMSW2nF2tZ"
-m "{temperature:25}"
Client null sending CONNECT
Client null received CONNACK (0)
Client null sending PUBLISH (d0, q1, r0, m1, 'v1/devices/me/telemetry', ... (16 bytes))
Client null received PUBACK (Mid: 1, RC:0)

```

## Tablero para mostrar los datos:

Tableros					
<input type="checkbox"/>	Hora de creación ↓	Título ↑	Asignado a customers	Público	
<input type="checkbox"/>	2025-09-29 07:35:10	Examen		<input type="checkbox"/>	     



Código Arduino configurado con mi wifi, mi mqtt y el token de acceso y cargándolo en la esp-32:

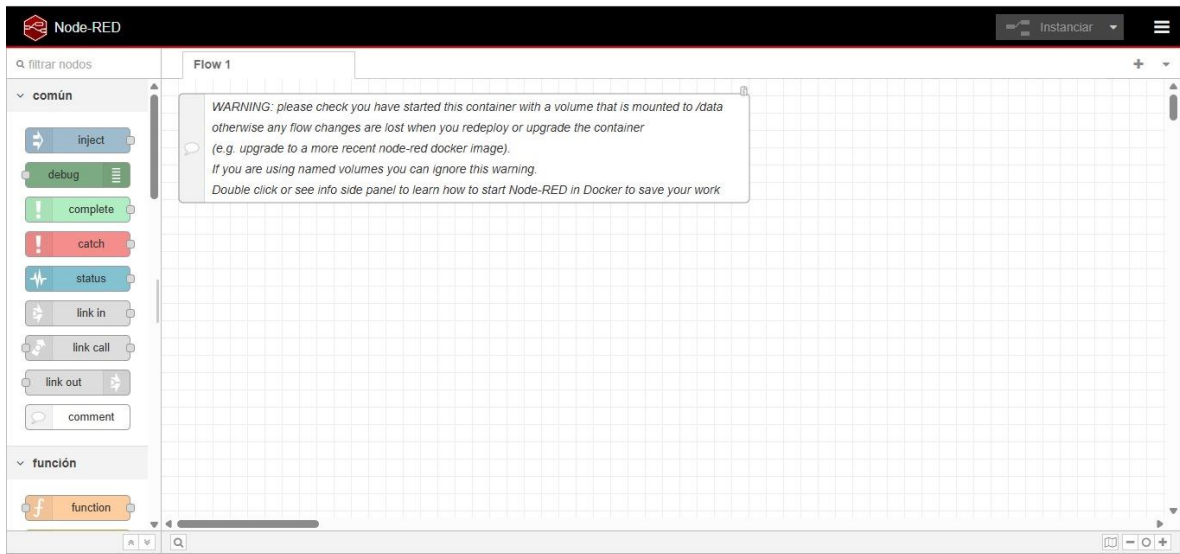
sketch\_sep29a.ino

```

1  #include <WiFi.h>
2  #include <PubSubClient.h>
3
4  // Configuración WiFi
5  const char* ssid = "Souuuuu";
6  const char* password = "2131415161";
7
8  // Configuración ThingsBoard
9  const char* mqtt_server = "mqtt://TU_IP_LOCAL:1883";
10 const int mqtt_port = 1883;
11 const char* token = "LPaXw3DpN0PM5W2nF2tZ";
12
13 // Topics MQTT
14 const char* telemetry_topic = "v1/devices/me/telemetry";
15 const char* rpc_topic = "v1/devices/me/rpc/request/";
16
17 WiFiClient espClient;
18 PubSubClient client(espClient);

```

Node:RED:



Coneccionn:

Fallida no se conecto falla en los puertos.