

# Arduino IDE con IoT: Escaneo Wifi

Desde [https://github.com/espressif/arduino-](https://github.com/espressif/arduino-esp32/blob/master/libraries/WiFi/examples/WiFiScan/WiFiScan.ino)

[esp32/blob/master/libraries/WiFi/examples/WiFiScan/WiFiScan.ino](https://github.com/espressif/arduino-esp32/blob/master/libraries/WiFi/examples/WiFiScan/WiFiScan.ino) podemos encontrar este programa para escanear las redes wifi desde nuestro ESP32 Arduino

<https://app.arduino.cc/sketches/54b6f875-2961-4ec5-8a48-608d9dde5feb?view-mode=preview>

<https://app.arduino.cc/sketches/54b6f875-2961-4ec5-8a48-608d9dde5feb?view-mode=embed>

**y da este error NO DEU dfu-util: No DFU capable USB device available Failed uploading: uploading error: exist status 74 ¿Por qué?**

No has preparado convenientemente el ALVIK haz <https://libros.catedu.es/books/arduino-alvik/page/preparar-alvik-para-arduino-ide-modo-bootloader>

## Instalando la librería Wifi.h

Te dará un error de compilación pues no tiene esta librería. Puedes descargar la versión última desde <https://www.arduino.cc/reference/en/libraries/wifi/>

[FUNCTIONS](#)[VARIABLES](#)[STRUCTURE](#)[LIBRARIES](#)[IOT CLOUD API](#)[GLOSSARY](#)

## WiFi

### Communication

Enables network connection (local and Internet) using the Arduino WiFi shield. With this library you can instantiate Servers, Clients and send/receive UDP packets through WiFi. The shield can connect either to open or encrypted networks (WEP, W The IP address can be assigned statically or through a DHCP. The library can also m. DNS.

[Go to repository](#)

Note: this library was retired and is no longer maintained.

### Compatibility

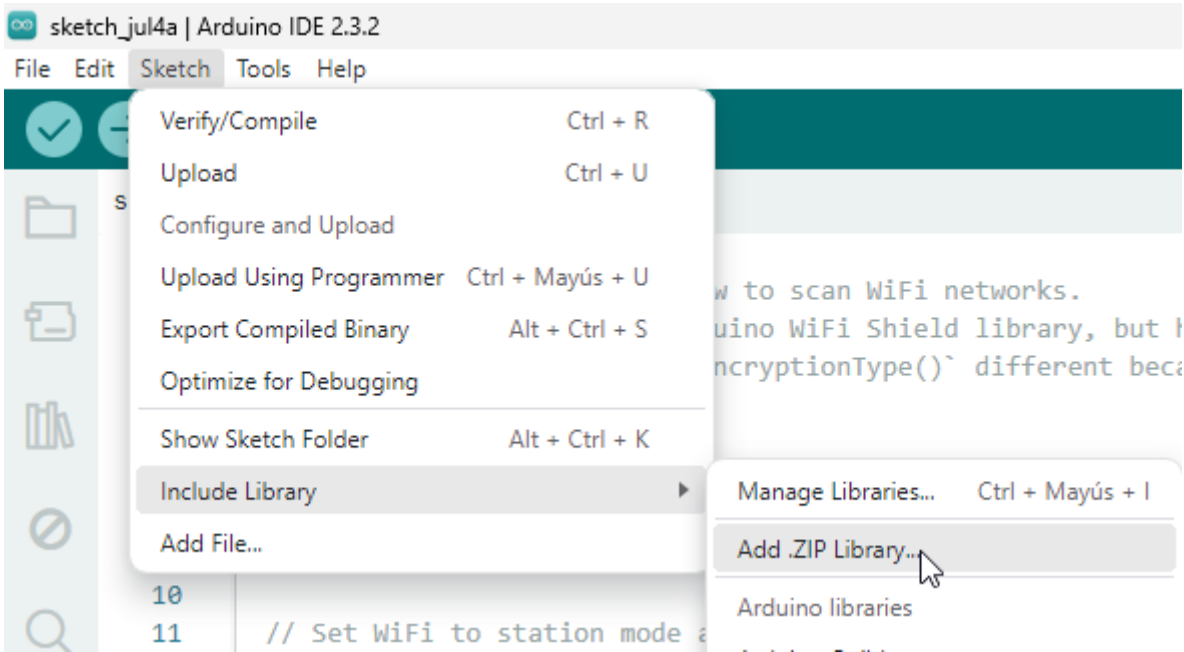
This library is compatible with **all** architectures so you should be able to use it on all Arduino boards.

### Releases

To use this library, open the [Library Manager](#) in the Arduino IDE and install it from t

- 1.2.7 (latest)
- 1.2.6
- 1.2.5

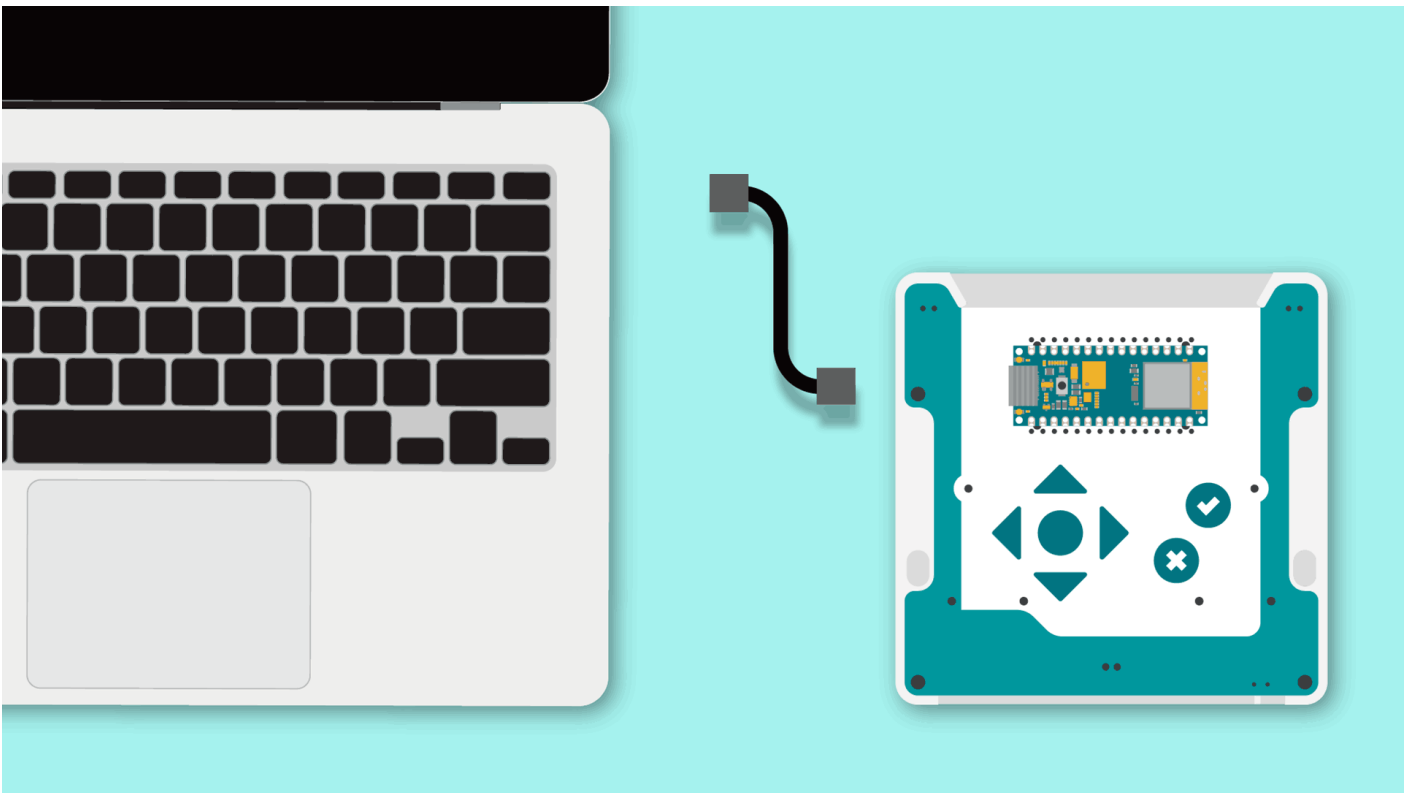
Una vez descargada (un fichero ZIP no lo descomprimas) en el editor Arduino IDE se instala desde este menú



Seleccionamos el fichero Zip que has descargado y ya tenemos la librería instalada

## Compilamos

Antes de compilar CONECTAMOS NUESTRO ESP32

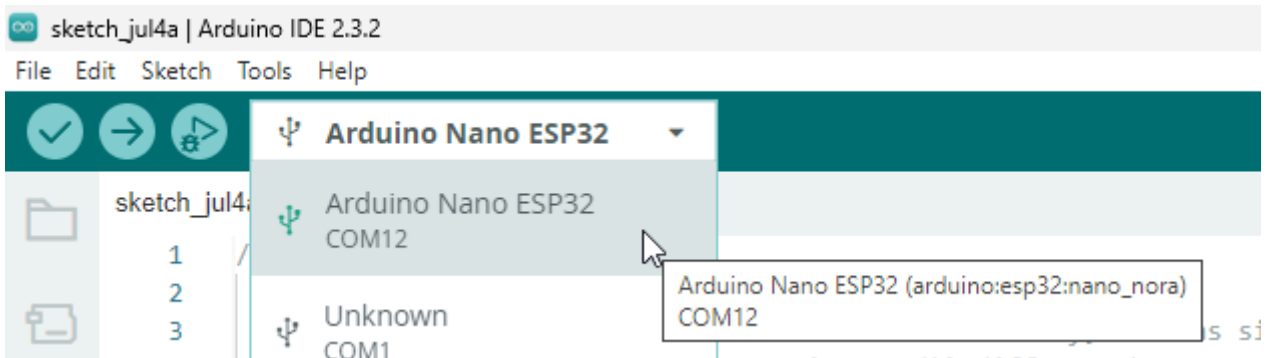


Licencia CC-BY-NC-SA origen <https://courses.arduino.cc/explore-robotics->

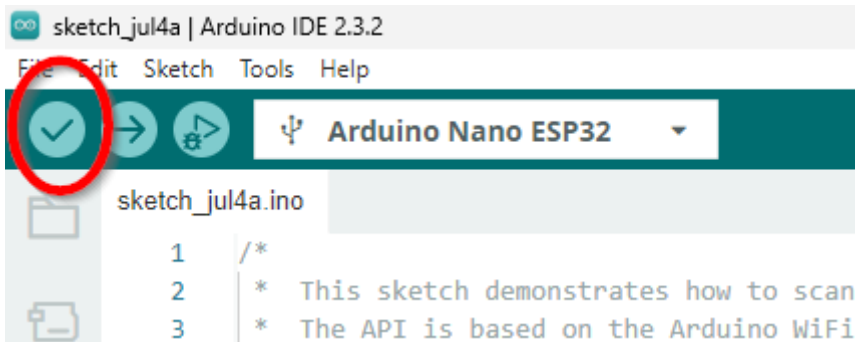
[micropython/lessons/getting-started/](https://micropython/lessons/getting-started/)

No hace falta encender el robot Arduino Alvik

Y seleccionamos la placa que ha reconocido

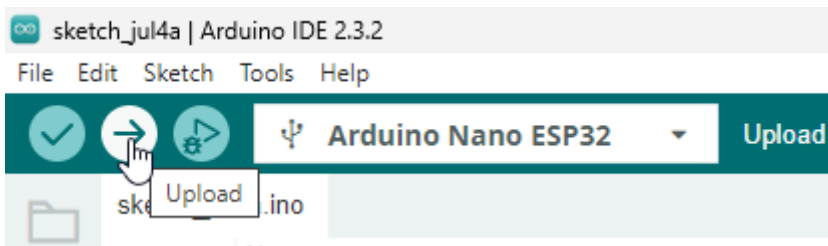


Y ya se puede compilar !!! no tiene que dar ningún fallo



## Subirlo al ESP32

Pues si lo intentas subir

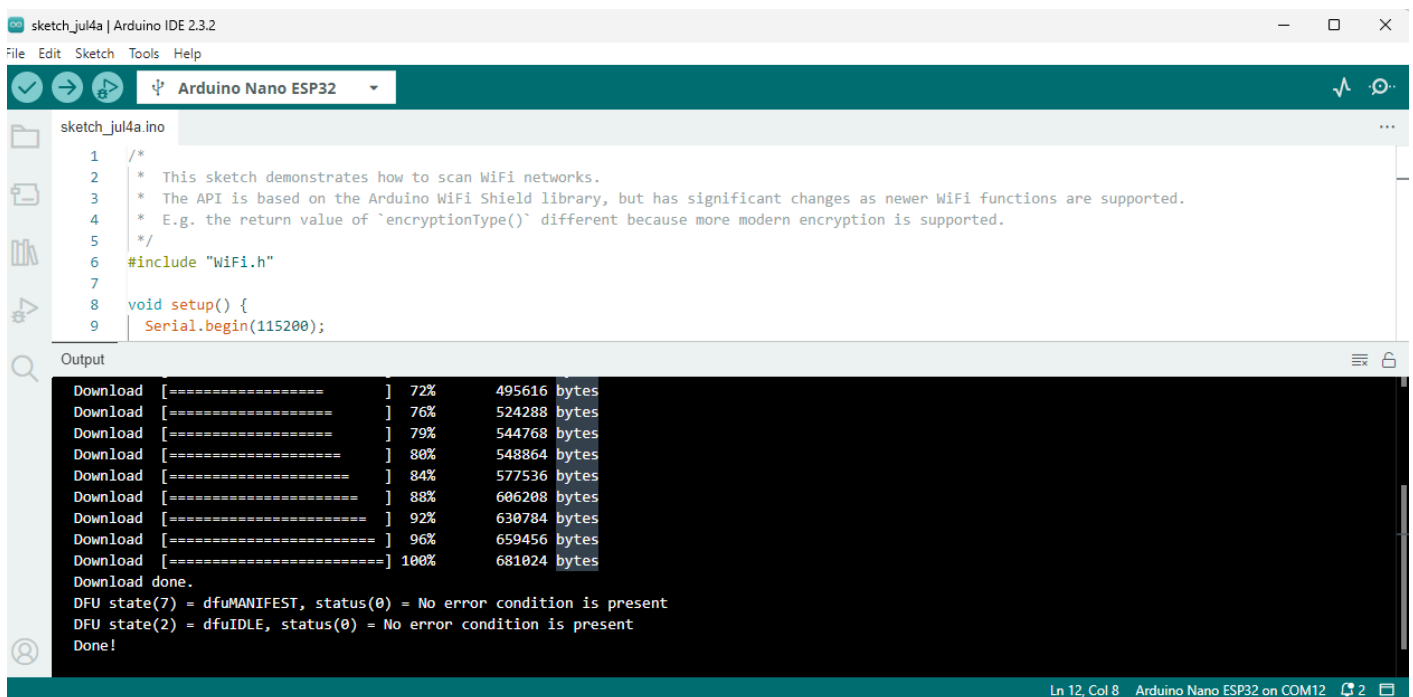


## y da este error NO DEU dfu-util: No DFU capable USB device available Failed uploading: uploading error: exist status 74 ¿Por qué?

Lee <https://libros.catedu.es/books/arduino-alvik/page/modo-bootloader>

## Resultado

Le damos a subir, y en la ventana de Output da como correcto

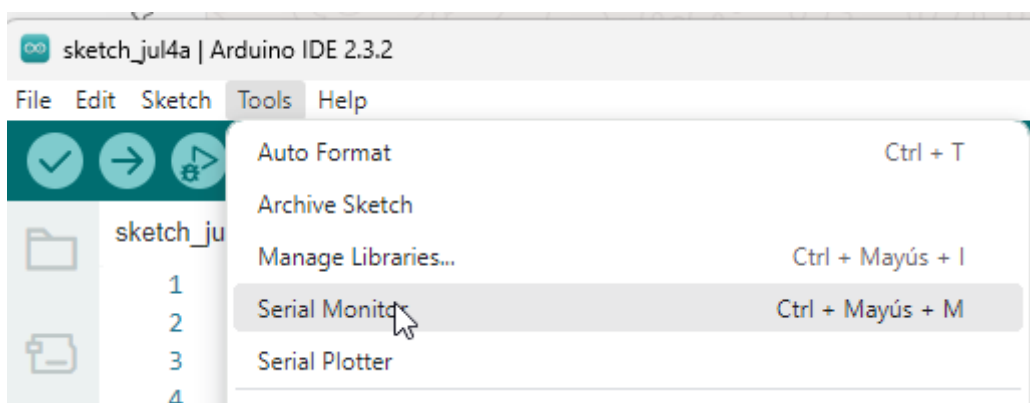


```

sketch_jul4a | Arduino IDE 2.3.2
File Edit Sketch Tools Help
Arduino Nano ESP32
sketch_jul4a.ino
1  /*
2  * This sketch demonstrates how to scan WiFi networks.
3  * The API is based on the Arduino WiFi Shield library, but has significant changes as newer WiFi functions are supported.
4  * E.g. the return value of `encryptionType()` different because more modern encryption is supported.
5  */
6  #include "WiFi.h"
7
8  void setup() {
9  Serial.begin(115200);
Output
Download [=====] 72% 495616 bytes
Download [=====] 76% 524288 bytes
Download [=====] 79% 544768 bytes
Download [=====] 80% 548864 bytes
Download [=====] 84% 577536 bytes
Download [=====] 88% 606208 bytes
Download [=====] 92% 630784 bytes
Download [=====] 96% 659456 bytes
Download [=====] 100% 681024 bytes
Download done.
DFU state(7) = dfuMANIFEST, status(0) = No error condition is present
DFU state(2) = dfuIDLE, status(0) = No error condition is present
Done!
Ln 12, Col 8 Arduino Nano ESP32 on COM12

```

Y si nos vamos a la ventana del monitor serie

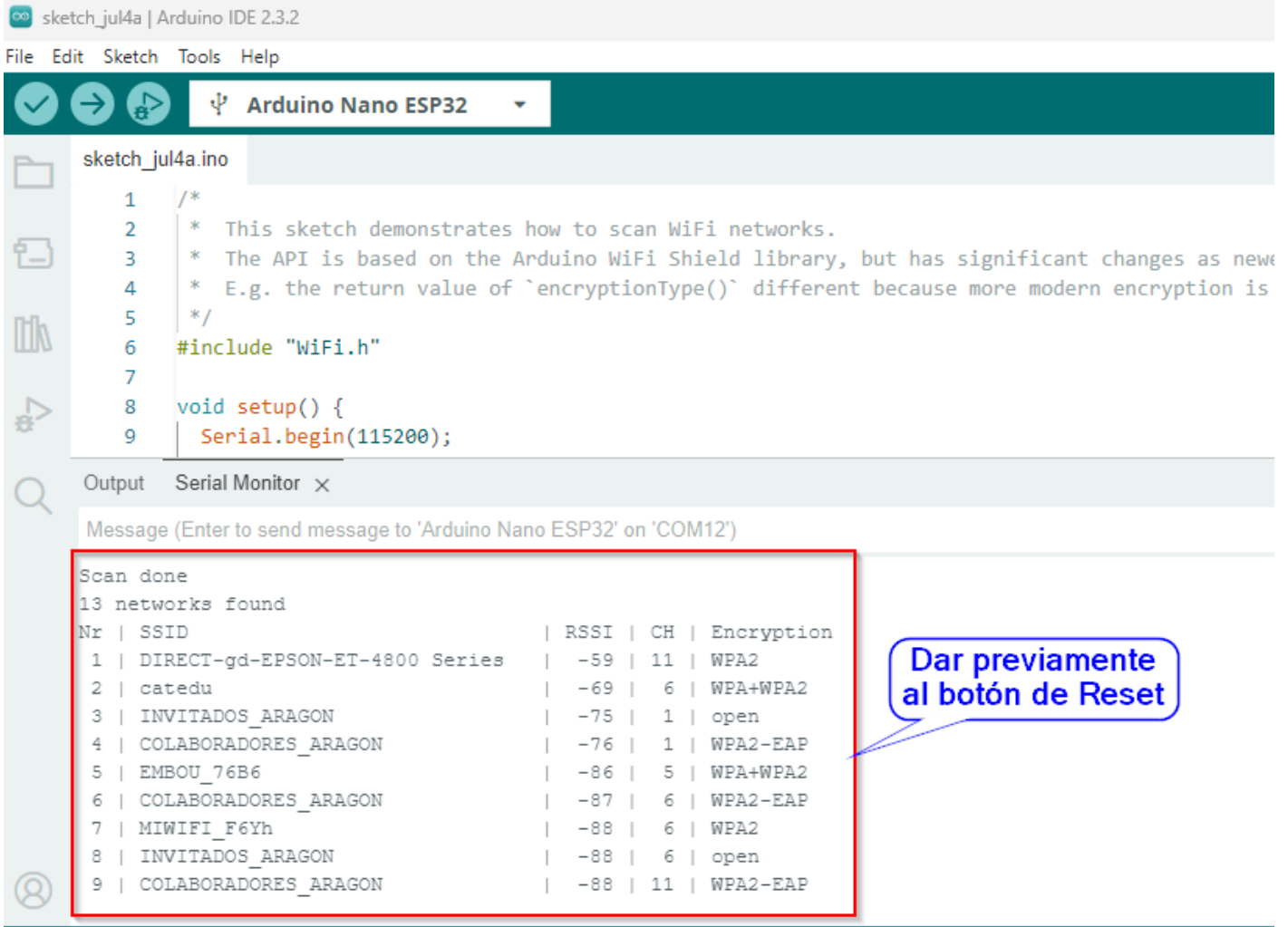


```

sketch_jul4a | Arduino IDE 2.3.2
File Edit Sketch Tools Help
Auto Format Ctrl + T
Archive Sketch
Manage Libraries... Ctrl + Mayús + I
Serial Monitor Ctrl + Mayús + M
Serial Plotter
sketch_ju
1
2
3
4

```

No nos sale nada !!! le das al botón de reset y ya sale :



sketch\_jul4a | Arduino IDE 2.3.2

File Edit Sketch Tools Help

Arduino Nano ESP32

```
sketch_jul4a.ino
1  /*
2  * This sketch demonstrates how to scan WiFi networks.
3  * The API is based on the Arduino WiFi Shield library, but has significant changes as new
4  * E.g. the return value of `encryptionType()` different because more modern encryption is
5  */
6  #include "WiFi.h"
7
8  void setup() {
9  Serial.begin(115200);
```

Output Serial Monitor x

Message (Enter to send message to 'Arduino Nano ESP32' on 'COM12')

```
Scan done
13 networks found
Nr | SSID | RSSI | CH | Encryption
1 | DIRECT-gd-EPSON-ET-4800 Series | -59 | 11 | WPA2
2 | catedu | -69 | 6 | WPA+WPA2
3 | INVITADOS_ARAGON | -75 | 1 | open
4 | COLABORADORES_ARAGON | -76 | 1 | WPA2-EAP
5 | EMBOU_76B6 | -86 | 5 | WPA+WPA2
6 | COLABORADORES_ARAGON | -87 | 6 | WPA2-EAP
7 | MIWIFI_F6Yh | -88 | 6 | WPA2
8 | INVITADOS_ARAGON | -88 | 6 | open
9 | COLABORADORES_ARAGON | -88 | 11 | WPA2-EAP
```

Dar previamente al botón de Reset

### ¿Puedo ahora ejecutar un programa en MicroPython?

No, tal y como dice aquí <https://libros.catedu.es/books/arduino-alvik/page/instalar-micropython> tienes que instalar el interpretador/compilador de Micropython dentro del ESP32, sino Arduino Lab for Micropython no se podrá conectar porque no lo encontrará.

Revision #17

Created 2024-07-04 11:29:49 CEST by Javier Quintana

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