

Access CELLS Eduroam with Windows 10:

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Why do I have to install the certificate?

With Eduroam you may be able to connect your laptop Wi-Fi with your <user>@cells.es to mainly any Research facility, or University, or Public Library, or even High Schools around the World.

Note: If you are **not** ALBA Staff, follow your own institution Eduroam instructions, NOT those ones!!!!

If you **belong to ALBA Staff**, to correctly connect from abroad to global Eduroam service, also running on ALBA Synchrotron, you **must install** the ALBA Certificate Authority (CA) for Eduroam in CELLS. **Your login and password security relay on this Certificate**. Do NOT trust Unknown Certificates, NEVER.

Why? Because once abroad ALBA, for a hacker, it's easy to install a rogue Wi-Fi hotspot telling the world "I am Eduroam" and getting your login and password if you connect. To avoid get tricked Eduroam uses Certificates, they will **warn you** if someone is cheating your connection. Install this certificate **before** going overseas, so you can easily check if you are really connecting to Eduroam or not.

Remember: In Eduroam, and Wi-Fi use **ALWAYS** secure connections: https / imaps / smtps / VPN.

Get certificate inside ALBA facilities

If you are on ALBA, you need any standard connections, **NOT GUEST!!!**, to get ALBA-Eduroam Certificate here (ALBA intranet access needed, from overseas use Workspace+Mozilla, see below):

<https://www.cells.es/static/WiFi-Eduroam-ALBA-CA-up-to-2029.der>

(sha256sum:

d7ac8bccf00770dd95e6b80c946943996c53f21b3cb869e84e54e27c5383ef2b)

with this hash you can verify the Certificate.

Get certificate from outside ALBA facilities

If you are **ABROAD**, including Guest network, we've a pair of procedure to get the ALBA Eduroam Certificate:

Connect Workspace (<https://workspace.cells.es>) and start up a remote browser there (ex.: Mozilla)

1. Save the certificate to your user "Downloads" on your browser Workspace

Or

2. Using the same Workspace browser, connect to your user <https://webmail.cells.es> and auto send the certificate attached to yourself.

Or

3. You may send it to your e-mail client via mobile.

Install the Certificate on your Laptop

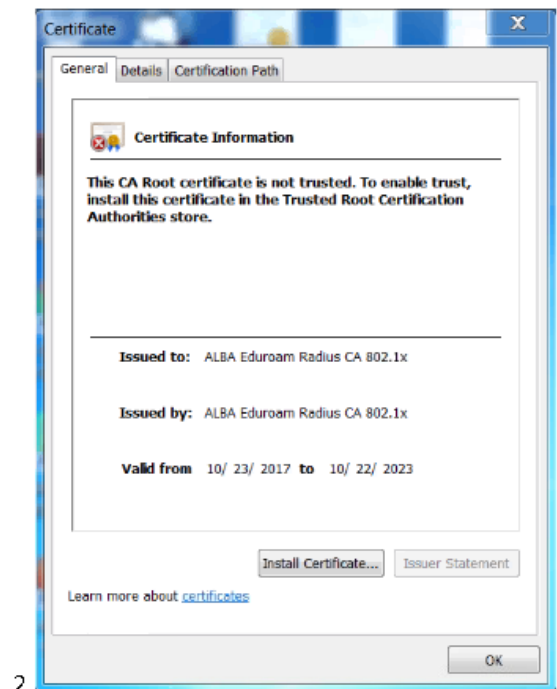
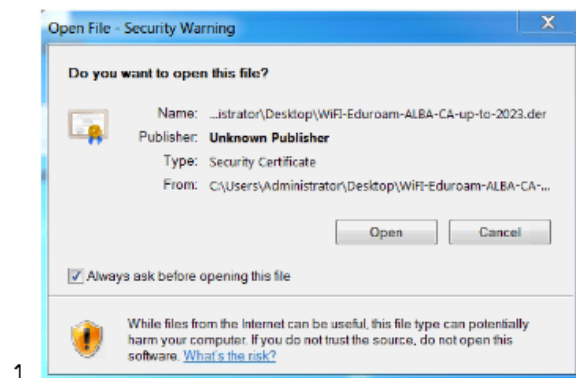
Now you have the ALBA Eduroam certificate "WiFi-Eduroam-ALBA-CA-up-to-2029.der".

Install it on your laptop. In Windows is easy, plug and pray.

(Note: If old ALBA cert already exist you may need to clear old ALBA eduroam.)

Click over it (Fig.1) an "Open".

Click on "Install Certificate" (Fig.2) the "ALBA Eduroam Radius CA 802.1x".



Select "Local Machine" (Fig.3) and "Place all certificates" in the following store" (Fig.4)
(Browse: select "Trusted Root Certificate Authorities")



Welcome to the Certificate Import Wizard

This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.

A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.

Store Location

Current User

Local Machine

To continue, click Next.



Certificate Store

Certificate stores are system areas where certificates are kept.

Windows can automatically select a certificate store, or you can specify a location for the certificate.

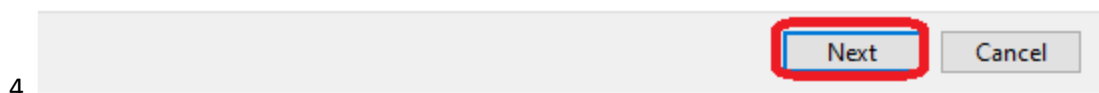
Automatically select the certificate store based on the type of certificate

Place all certificates in the following store

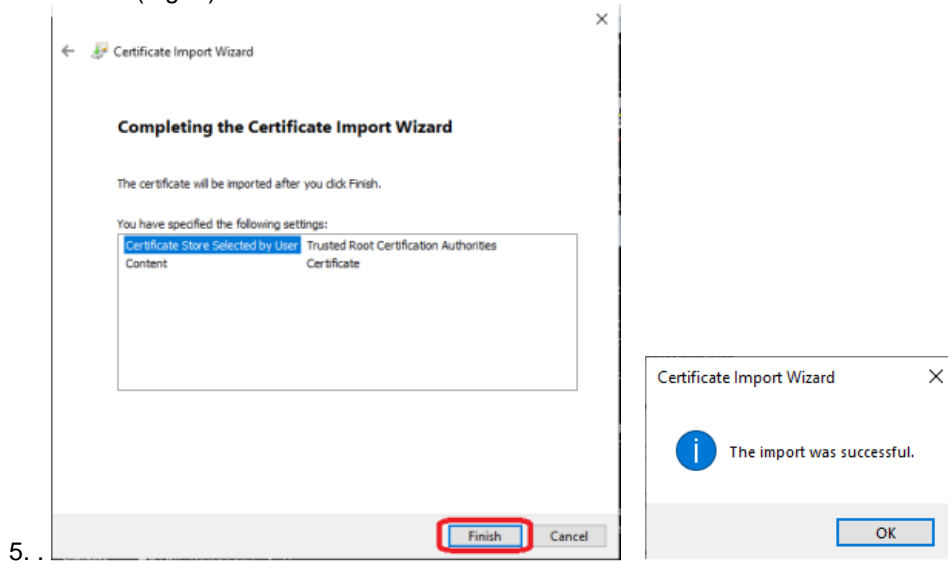
Certificate store:

Trusted Root Certification Authorities

Browse...



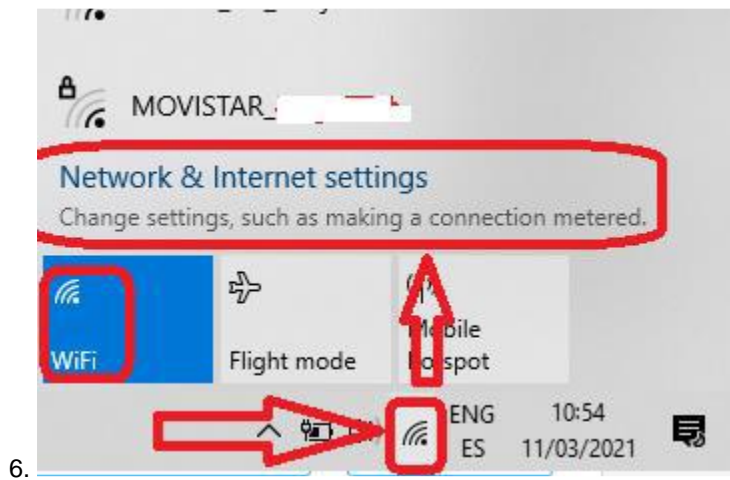
Let's finish (Fig. 5) the Certificate installation. **Seems** is not needed to reboot the Win10 laptop.



Configure the CELLS Eduroam settings

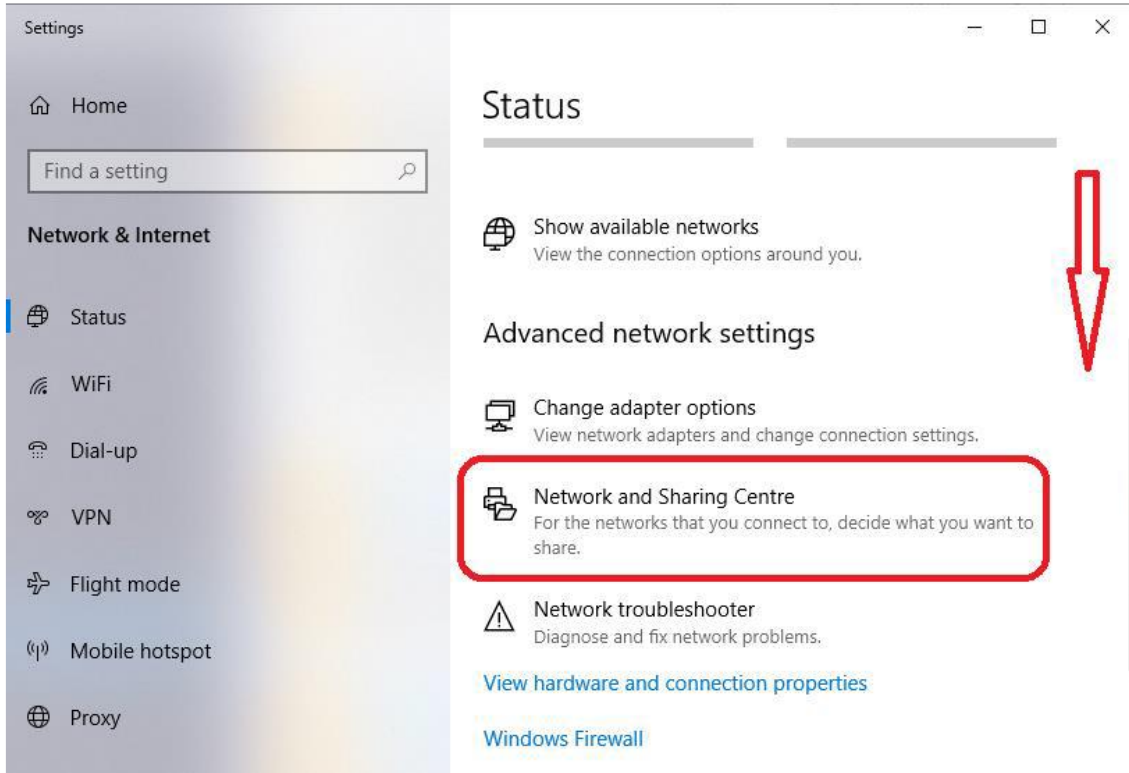
Once the certificate is already configured, on the main Windows 10 task bar, go to **below-right corner** search for Wi-Fi icon.

Click on it (Fig.6), then to "Network & Internet settings".



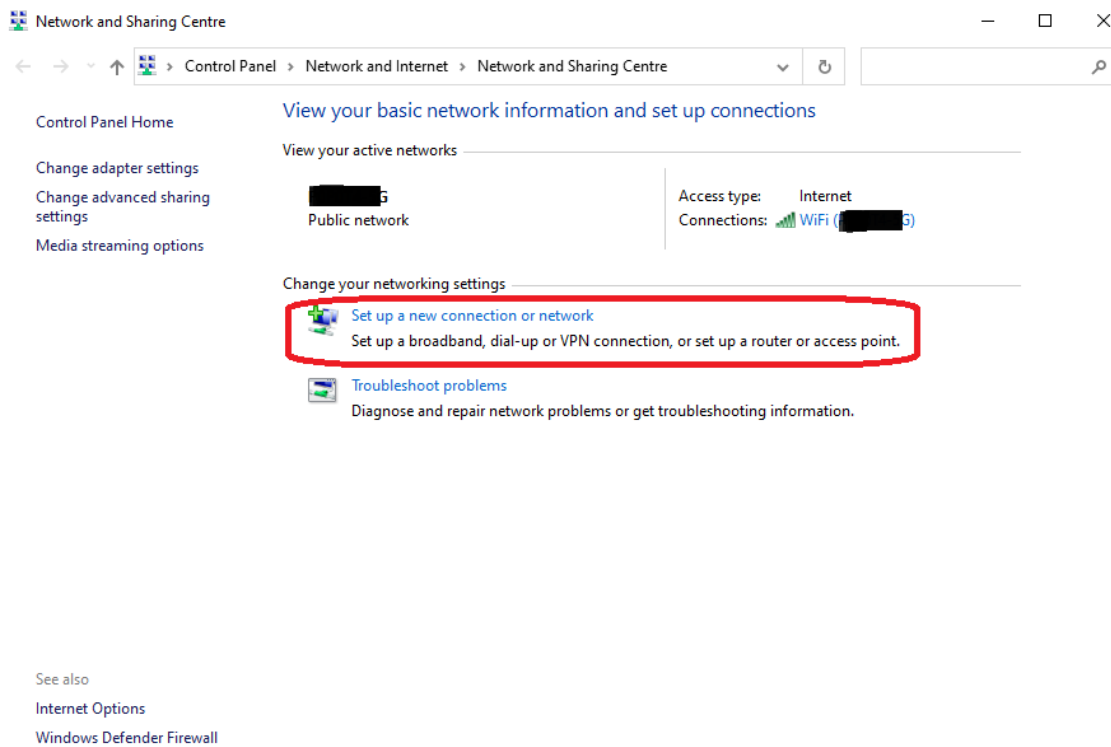
On "Status" window section **go down** until appears "Advanced network settings" section. Click on "Network and Sharing Center" (Fig.7)

7.



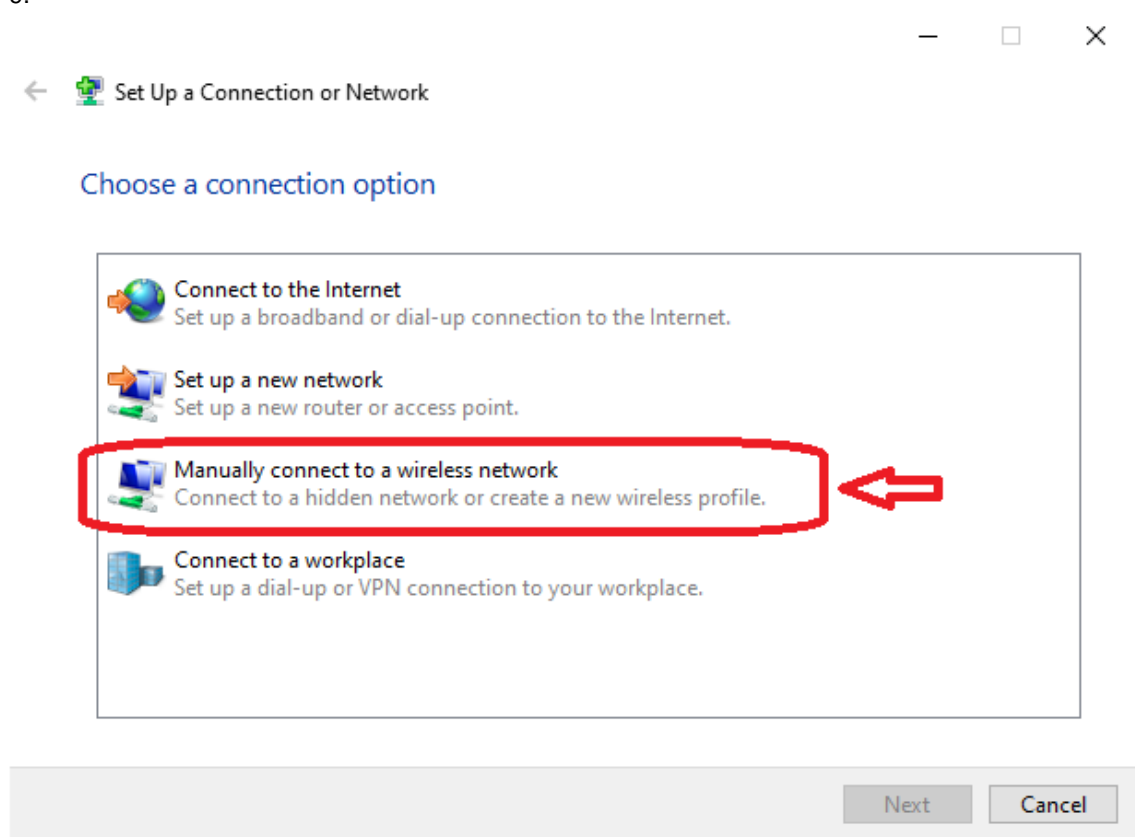
On "Network and Sharing Centre", (Fig.8), click on "Set up a new connection or network"

8.



On "set Up a Connection or Network" (Fig. 9) select "Manually connect to a wireless network"

9.



On "Manually connect to a wireless network", (Fig. 10) set the Network Name "eduroam", Security "WPA2-Enterprise", Encryption type should be automatically set to "AES" or similar. We recommend do NOT set "Start this connection automatically". Or WiFi will try to connect automatically to any "eduroam" it may found available. **Better you connect by hand when needed.**

10.

← Manually connect to a wireless network

Enter information for the wireless network that you want to add

Network name:

Security type:

Encryption type:

Security Key: Hide characters

Start this connection automatically

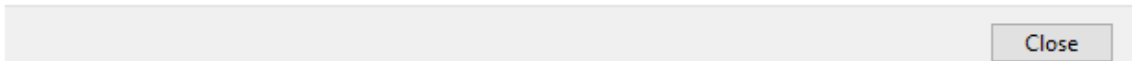
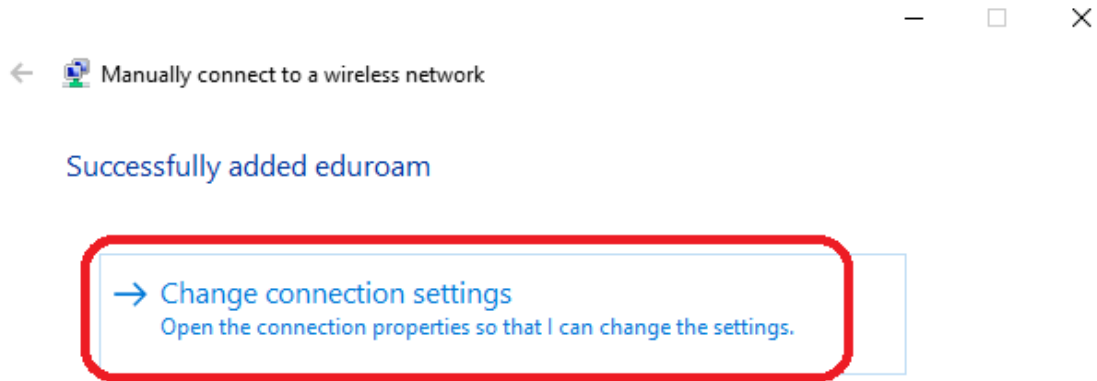
Connect even if the network is not broadcasting

Warning: If you select this option, your computer's privacy might be at risk.

In our case “eduroam” **does not exist** on the laptop and we can carry on, but in the case it already exists, we’ll have a problem. Then the laptop **MUST** forget the eduroam net. See below on section “How to forget any old, non-ALBA, non-working Eduroam on your WiFi”

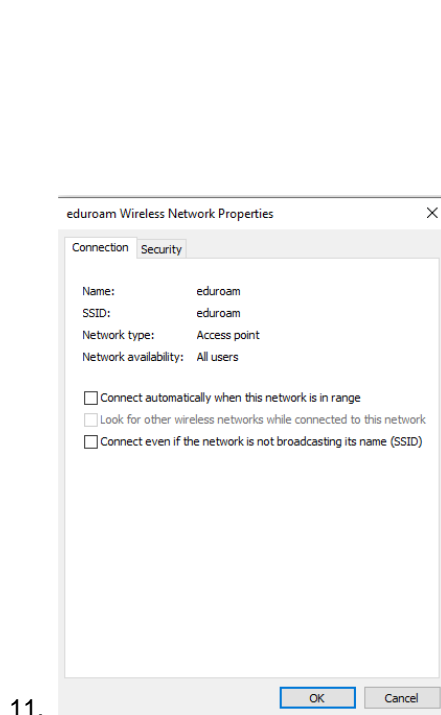
Let's continue, click on "Change connection settings" (Fig.10)

10.

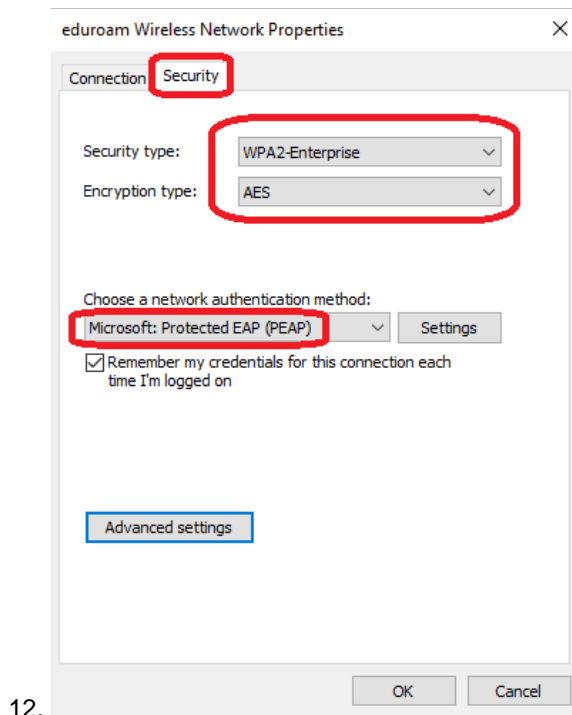


Let's configure the whole ALBA-CELLS Eduroam on your laptop.
On "eduroam Wireless Network Properties", on tab "Security" (Fig.12):

1. Security type "WPA2-Enterprise"
2. Encryption type "AES"



11.

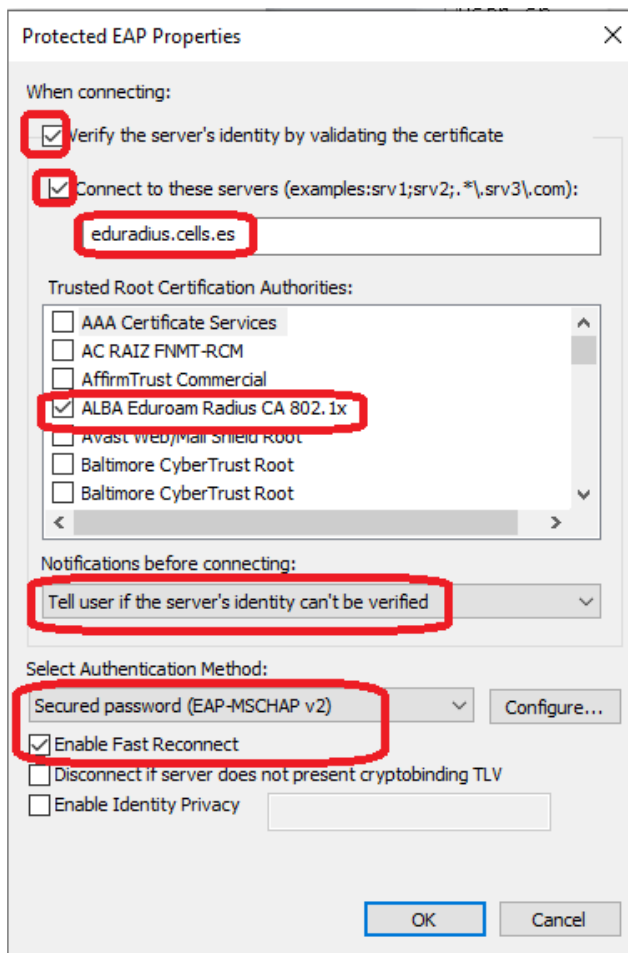


12.

Click on “Settings” (Fig.12) will open a “Protected EAP Properties”(Fig.13).

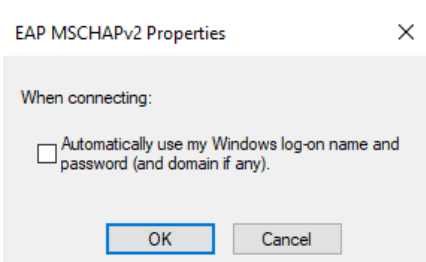
After setting them, click on “Configure”, will pop up “EAP MSCHAPv2 Properties” (Fig.14), do not select, just Ok. And OK again on “Protected PEAP Properties”:

1. Set: Verify the server identity....
2. Connect to these servers: write down “eduradius.cells.es”
3. On Trusted Root Certs : Select “ALBA Eduroam Radius CA 802.1x”
4. On notifications: “Tell user if the server’s identity can’t be verified”
5. On “Select Authentication Method: “Secure password (EAP-MSCHAPv2)”
6. Set: Enable Fast Reconnect
7. On “Configure” (Fig.14), set nothing, just ok.
8. Ok, and exit to the last step.



13.


On “Configure” (Fig.14) do set anything. Just Ok.



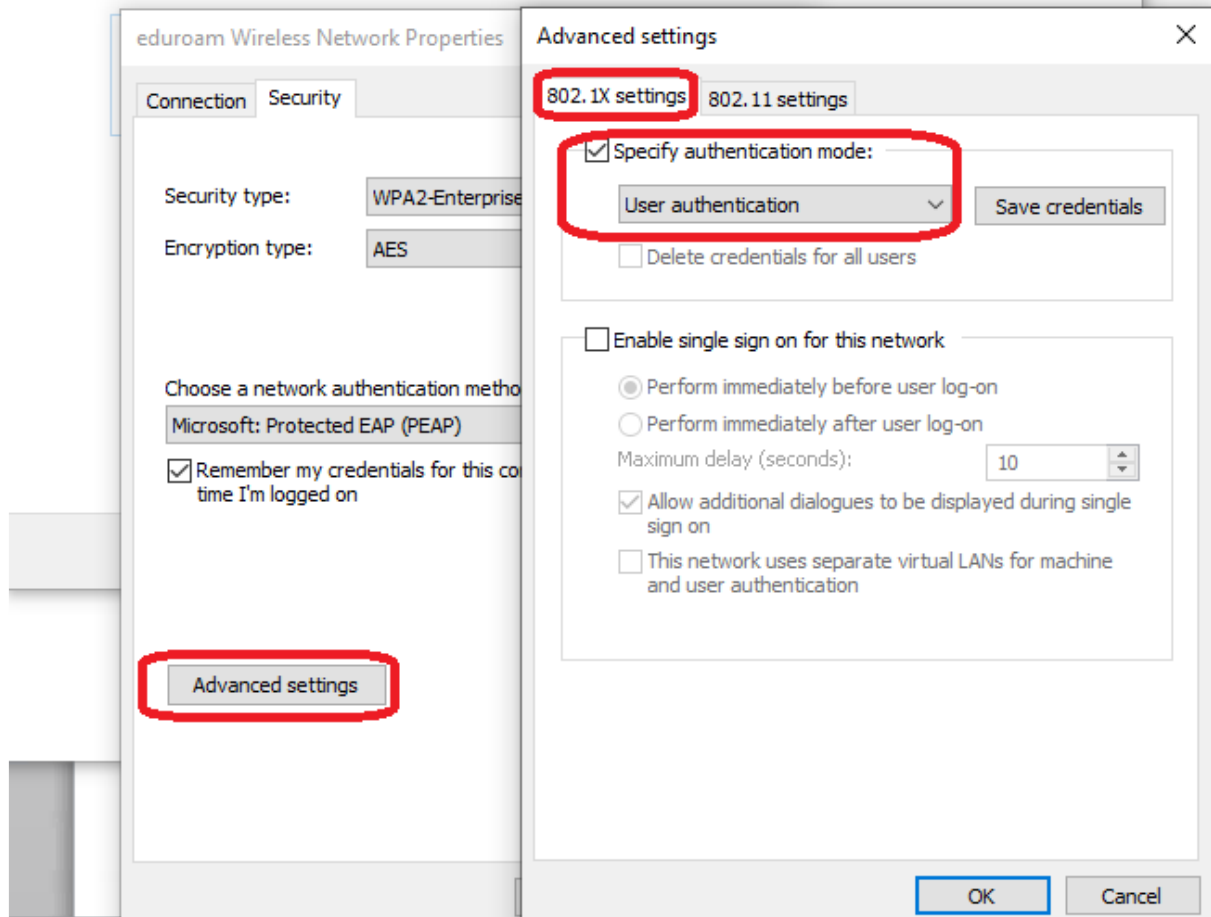
14.

On "eduroam Wireless Network Properties" (Fig.15), click "Advanced Settings". On "Advanced Settings", tab "802.1x settings" choose "User authentication". And OK.

15.

←  Manually connect to a wireless network

Successfully added eduroam



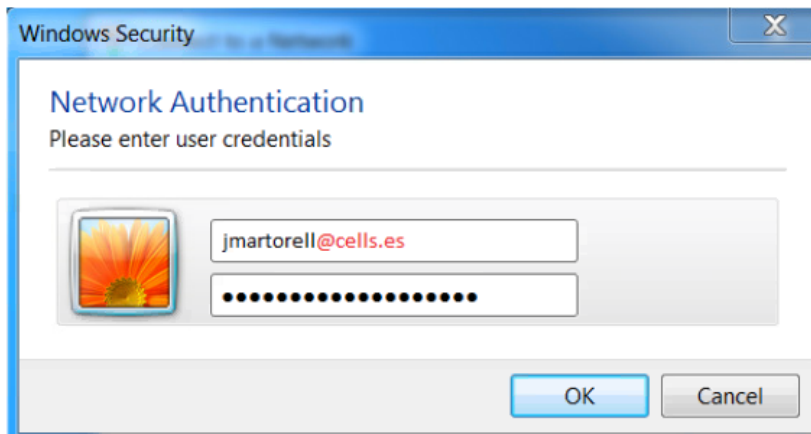
Try to connect first at ALBA, if possible, to check the whole settings.

When WiFi "Eduroam" network is available, try to connect.

Windows shall ask you (Fig.16) ALBA login & a password.

Remember to use your institution LOGIN@YOUR-DOMAIN.

If you are CELLS staff, then should be like jmartorell@cells.es.



16.

Note: This seems an e-mail, but is "your login" @ "your institution".

See below to FORGET any OLD ALBA or NON-ALBA Eduroam.

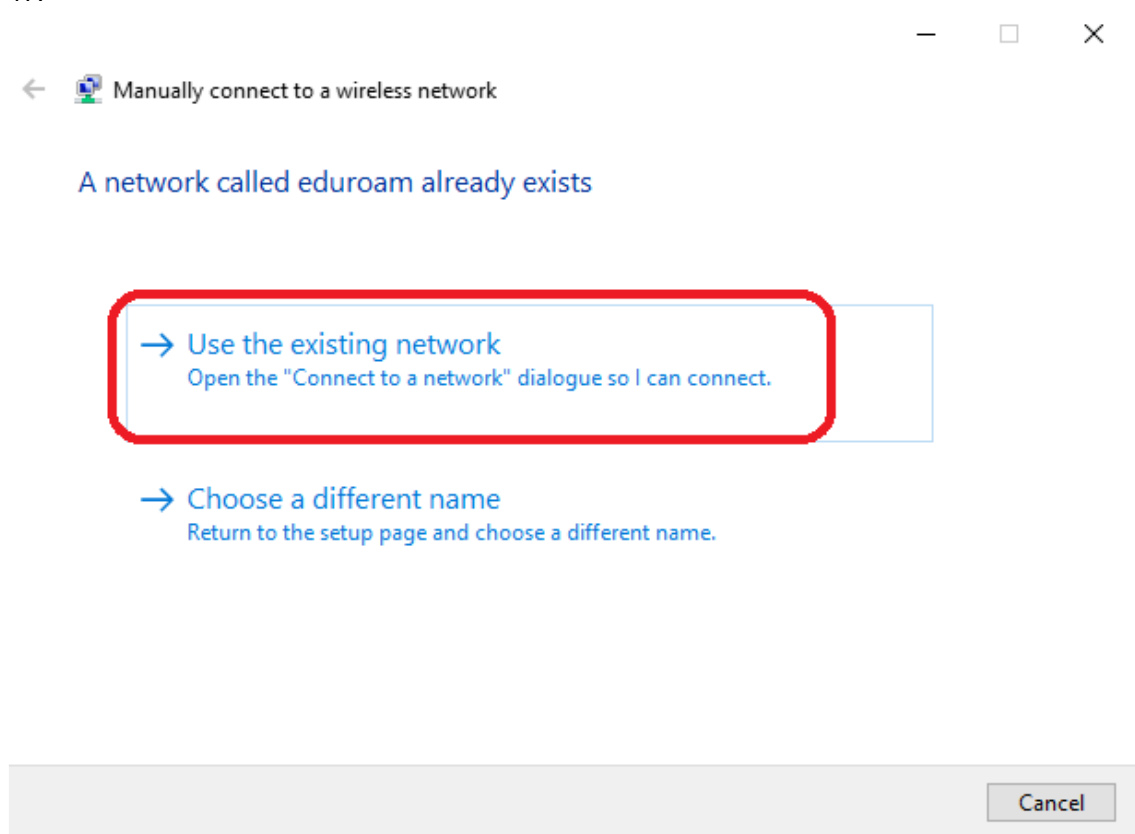
How to forget any old, non-ALBA, non-working Eduroam on your WiFi

Imagine you want to connect with CELLS Eduroam, but you already have, UAB or UPC one installed, or your Eduroam CELLS is not working fine anymore and you will want to have a new try.

Note: ***** Multiple Eduroam configurations are not compatible, so It can only be one. *****

In this case (Fig.17), the “eduroam” net was already set and is NOT correctly configured, we need to “Forget” eduroam Wifi

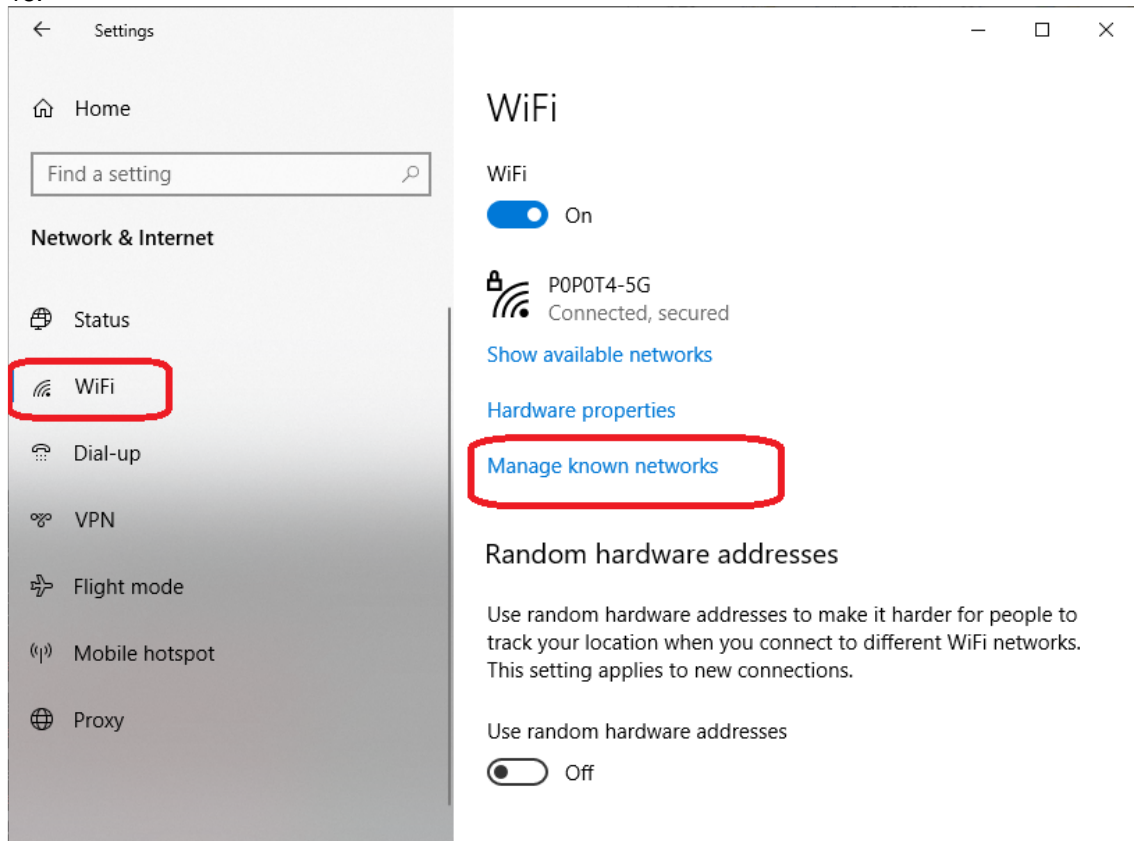
17.



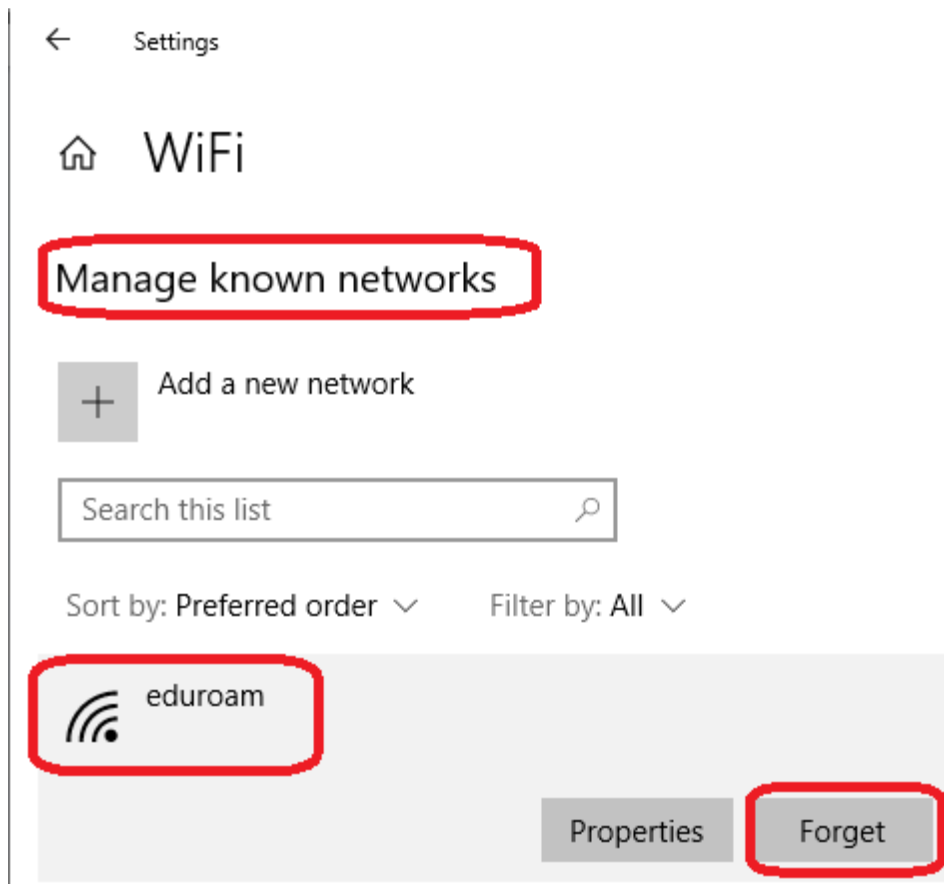
To forget a wrong/ not CELLS, or old ALBA, configured wifi eduroam (Fig.18):

1. Click the Wi-Fi button from the bottom-right corner of the taskbar.
2. Click Network & Internet settings.
3. Select “Manage known networks”

18.



Once the wrong/not CELLS “eduroam” is forgotten (Fig.19), begin again from WiFi icon:



19.

From this point on, follow the standard configuration