

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA AREA SISTEMI E SERVIZI INFORMATICI

# Internet access system through the ALMAWIFI wireless network of the University of Bologna MAC OS (last update al 19/03/2025)

# The updated version of the document is always the one published online at <u>http://www.unibo.it/almawifi</u>

This document shows how to securely connect your MAC OS/X device to the ALMAWIFI network of the University of Bologna.

A WPA2-Enterprise security access system has been implemented on every access point according to the requirements of WI-FI Alliance, which guarantees complete encryption of all the traffic flows.

During this process, you will be asked for your DSA (University Directory Service) institutional credentials, which will be checked by a centralized server (Radius Server); only after passing the checks, your computer will be automatically connected to the Internet.

This process must be done only the first time because subsequently your operating system will automatically pass both the configuration and the credentials.

We remind you that user credentials should be activated by setting a personal password via the following website: https://www.dsa.unibo.it

For further information about connection problems please consult FAQ ALMAWIFI at http://www.unibo.it/almawifi

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#### Previous profile removal

If you experience some problems due to a pre-existent connection or if you want to edit it, we suggest you to delete it before proceeding.

Click on the wireless network icon on the upper right and select Open Network Preferences...



On the WIFI section of the network window, click on Advanced...

	Network	Q, Search
Lo	Automatic	0
• Wi-Fi Connected	Status: Connected	Turn Wi-Fi Off
• Ethernet	Wi-Fi is connected IP address 10.200.2	to ALMAWIFI and has the 2.115.
• FireWire Not Connected	Network Name: ALMAWIFI	•
Bluetooth PAN     Not Connected	Ask to join new Known networks v	w networks will be joined automatically, if
• Thundet Bridge	no known network to manually select	ks are available, you will have t a network.
	802.1X: Default	Disconnect
	Authenticated via E Connect Time: 00:1	SAP-PEAP (MSCHAPv2) 02:36
+ - *-	Show Wi-Fi status in menu bar	Advanced ?
	Assist me	Revert Apply

Select ALMAWIFI network and click on the minus icon to remove it.

000 <	> ===			Netw	vork			Q Search
🤶 Wi-Fi								
	Wi-Fi	TCP/IP	DNS	WINS	802.1X	Proxies	Hardwar	re
Pre	eferred Net	works:						
Ne	etwork Name			S	ecurity			
AL 1999 1993 1994 1994 1994 1994 1994 1994					/PA2 Enter /PA/WPA2 /PA/WPA2 /PA/WPA2 /PA/WPA2 /PA2 Perso	prise Personal Personal Personal Personal nal		
H ■ Rea ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	Remember quire admir Create c Change Turn Wi-	g networks i r networks nistrator a computer-t networks -Fi on or o s: e0:f8:4	into the o this cor uthoriza co-comp ff 7:1f:04::	rder you p mputer ha tion to: outer netv 3a	refer. as joined vorks			
?							Cano	cel OK

#### Client configuration using Mac OS

The operating system must be Mac OS X 10.3 or later; this OS automatically recognizes if the network you are joining uses WPAx-Enterprise, and it gives you the correct prompt.

WPA works best in Mac OS X 10.3.3 or later with AirPort software 3.3 or later.

There are two ways to set up WPA, Personal and Enterprise. For a school or business, WPA Enterprise can provide each user with unique credentials. WPA2-Enterprise uses the same security as WPA Personal, but with the added measure of individual usernames and passwords.

When you want to switch to wireless: Click on the Wi-Fi icon, and choose Turn Wi-Fi On.



In the same menu, select ALMAWIFI.



The WIFI window will appear. You will need to enter the appropriate configuration settings for the ALMAWIFI network detailed below:

000	AirPort		
Il network AirPort selezi	onato richiede una password di accesso.		$\sim$
Sicurezza wireless:	WPA Enterprise		
Nome utente:	nome.cognome@	Enter a name a	nd password for network "ALMAWIFI"
Password:		Account Name:	nome.cognome@unibo.it
Configurazione 802.1X:	Automatico	Password:	••••••
	🗌 Memorizza la password nel portachiavi	Remember th	is information
(?)	Annulla OK		Cancel

macOS X 10.3



- Wireless Security: WPA2 Enterprise
- User name: name.surname@unibo.it for staff of University, name.surname@studio.unibo.it for students of University
- Password
- 802.1X Configuration: set to Automatic

Click OK.

You will see a Verify Certificate dialog box. Click **Show Certificate** button to review and approve.

000	Verify Cert	ficate
$\bigcirc$	Authenticating to network "A	LMAWIFI"
	Before authenticating to server "a server's certificate to ensure that	mawifi.unibo.it", you should examine the it is appropriate for this network.
	To view the certificate, click 'Show	/ Certificate'.
?	Show Certificate	Cancel Continue

Clicking **Continue** will allow the certificate to be accepted for this single connection. To accept the certificate permanently and avoid going through the process in the future, check the **Always trust these certificates** box:

	Verify Certificate
$\bigcirc$	Authenticating to network "ALMAWIFI"
	Before authenticating to server "wifi.unibo.it", you should examine the server's certificate to ensure that it is appropriate for this network.
	To view the certificate, click 'Show Certificate'.
🗸 Always trust	"wifi.unibo.it"
USERTru:	st RSA Certification Authority
L, 📴 GEAN	NT OV RSA CA 4
L, 🔛 V	vifi.unibo.it
Certificate Standard	wifi.unibo.it Issued by: GEANT OV RSA CA 4 Expires: Wednesday, 24 December 2025 at 00:59:59 Central European Standard Time Inis certificate is valid
> Trust > Details	
?	Hide Certificate Cancel Continue

certificate\_name = wifi.unibo.it CA\_root\_name = USERTrust RSA Certification Authority entity that issued it = GEANT OV RSA CA4

If your Mac doesn't have the CA root in persona certificates folder, please download and install it via: <u>https://comodoca.my.salesforce.com/sfc/p/1N000002Ljih/a/3l00000VZ4M/ie5Sho19m8SLjTZkH\_VL8efOD</u> <u>1qyGFt9h5Ju1ddtbKQ</u>

When you are connected the airport icon at the top right of your desktop will turn black.



## Instructions for accepting the new ALMAWIFI certificate on Mac OS and IOS systems

After updating the certificate used to securely identify the ALMAWIFI wireless network, Mac OSX and IOS systems may ask for confirmation of acceptance of the new certificate.

Below is an example of what could happen when connecting to ALMAWIFI with IOS or Mac OSX systems.

If this message appears when connecting to AlmaWifi with an IOS system:



Verify that:

- the certificate name is: wifi.unibo.it
- the certificate is issued by GEANT OV RSA CA4
- the certificate is Valid

then click on "Authorize"

If this message appears when connecting to AlmaWifi with a MAC OS system:

000	Verifica il Certificato
$\bigcap$	Effettuo autenticazione al network "ALMAWIFI" Prima di effettuare l'autenticazione al server "almawifi unibo it", dovresti
	esaminare il certificato del server per assicurarti che sia adatto a questo network.
	Per visualizzare il certificato, fai clic su Mostra certificato.
?	Mostra certificato Annulla Continua

click Continue to accept the certificate for this single connection.

To permanently accept the certificate, avoiding selecting it for each connection, add the flag to Always trust these certificates: wifi.unibo.it

000	Verify Certificate	
	Authenticating to network "ALMAWIFI" Before authenticating to server "wifi.unibo.it", you should examine the server's certificate to ensure that it is appropriate for this network. To view the certificate, click 'Show Certificate'.	
🗸 Always trust	"wifi.unibo.it"	
📴 USERTru L, 📴 GEA	IST RSA Certification Authority NT OV RSA CA 4	
Ц. 📴 🤊	wifi.unibo.it	
Certificate Suiderl	wifi.unibo.it Issued by: GEANT OV RSA CA 4 Expires: Wednesday, 24 December 2025 at 00:59:59 Central European Standard Time Image: This certificate is valid	
> Trust		
> Details		
?	Hide Certificate Cancel Continue	

Parameters must match the following:

certificate\_name = wifi.unibo.it CA\_root\_name = USERTrust RSA Certification Authority entity that issued it = GEANT OV RSA CA4

#### Limited or no connection / Internet not available

If the device is connected to ALMAWIFI but does not browse the Internet (message "limited or no connection", "no Internet access", "Internet not available, etc."), you need to check that both IP and DNS are automatic (DHCP active).

The DNS and TCP/IP tabs are available, starting from System Preferences, selecting the Network item, the connection currently in use (Wi-Fi) and then pressing the Advanced button at the bottom right:

	Posizione:	Automatica	4	
No.4	(1:	Stato:	Connesso	Disattiva Wi-Fi
Ethernet Non connesso	<>		Wi-Fiè corresso a ALM/ 10.200.3.88	WFI con Tindirizzo IP
FireWire Non connesso	***	Nome network:	ALMAWIFI	0
Non connesso	0	Caccesso al network o nessur network o	erk conesciuti sarà autornat conseciuto, dovrai selectionar	os. Se non è disponible re uno manualmente.
		802.1%	Default Autenticato tramite EAP- Tempo di connessione: 0	Disconnetti PEAP (MSCHAPv2) 0:05:27